

# **Central Manager System**

## **User's Manual**

***V1.62***

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# 1. Preface

**Central Manager System** is a powerful remote manager system. It can allow administrator to manage DVR systems through network located in different sites from one point of control.

Each **CMS** system can manage up to 64 sets of 16CH DVR. You can monitor, playback, backup the DVRs' video files through network at any time. You can also proceed to set up the remote system configurations.

With user friendly GUI, administrator can monitor the DVRs very easily.

## 2. Installation

**CMS** can serve up to 64 DVR (1024 channles) at the same time. Before the installation, make sure your computer meets the following minimum requirement.

CMS	Requirement
OS	Windows 2000, Windows XP
CPU	P4 2.6G above
Display Card	64MB above (nVIDIA TNT2/ GeForce2/ GeForce4 are most optimal), 1024*768 screen resolution
RAM	512MB above
Hard Disk	20 GB above
Network Card	10/100Mbps
Mouse	PS/2 or USB compatible
CD-ROM	General
USB Interface	1.1 / 2.0
DirectX	V7.0 & above

### 2-1. Install CMS

1. Insert the installation CD.
2. Then go to the directory to run the Setup.exe and follow the steps.

When finishing the setups, it will show up the message.

Then, you can find the “**Central Manager**” folder and its sub menu from the Windows Start menu.



## ■ Tools

### ◆ Backup Information Tool

From this tool, you can get the information of backup file. Please refer to the **Chapter 4-11 Central Backup** for the backup configuration.

### ◆ Central Setup

There are two setup functions in Central Setup menu. TV Wall and Language configuration.



CMS provides TV Wall function. If you want to enable TV Wall function, you should “**Turn on TV-wall**” here.

From CMS V1.61 and above, Language configuration are moved to “**Central Setup**” menu. CMS are running in Microsoft Windows platform. When you activate CMS, it will detect the Windows Language version and auto switch CMS operation language with other language options according to the rule described in following table.

Microsoft Window Language version	Default CMS Operation Language	Language Options
English	English	English
Traditional Chinese	Traditional Chinese	English, Traditional Chinese
Simplified Chinese	Simplified Chinese	English, Simplified Chinese
Japanese	Japanese	English, Japanese
French, German, Polish, Portuguese, Spanish	English	French, German, Polish, Portuguese, Spanish

■ **Central Backup:**

Central Backup function enables user to backup DVRs files remotely. Please refer to the **Chapter 4-11 Central Backup** for the backup configuration.

■ **Dvr Player:**

This is a local DVR player. After user downloads the DVR video files, he can play the files in this player in the Window platform. Please see the **Chapter 4-12 User Local Playback**.

■ **Emap Editor:**

CMS provides Emap function so that you can see the camera locations in the MAP. Before enabling this function, user needs to edit his own EMAPs in the Emap Editor. Please refer to the **Chapter 4-8 EMAP Editor**.


■ **Central Manager User Manual:**

You can access the user manual in this folder.

■ **Central Manager**

Click this icon to start CMS.

## 3. Profile Manager

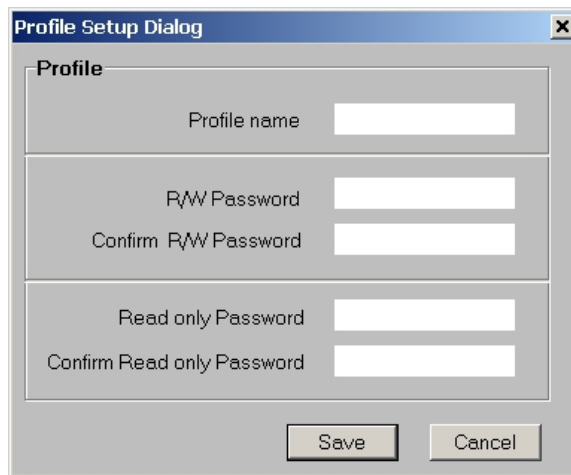
After the installation, start the application by clicking the icon  in the **CMS** folder from the Windows Start menu. The “**Profile Manager**” will show up to let the user to **Create, Delete, Edit, Import, Export** or **Open** “User Profile”.



First time to use CMS, user has to create a new “User Profile” to save the configuration of DVRs. You can create different **Profiles** for different configurations at the same time. Next time when you start the CMS, you don’t need to create a new User Profile any more and you just open one of Profile you prefer.

### 3-1. Create a New User Profile

Click “New” on the **Profile Manager**, it will show the Profile Setup Dialog as following



Key in the “Profile Name”, “Supervisor Password”(R/W Password), and “ User Password”(Read only Password) in the Profile Setup Dialog.

After the new profile has been created successfully, the new profile icon will be shown on the Profile Manager screen as below. Refer to 3-1-6 to build a new profile.




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**Note:**

- “Profile” name can’t exceed 50 characters.
  - “ Profile name” only supports Chinese & English words and does not support special marks.
  - Password can’t to exceed 30 characters.
  - Password only supports numbers& English character.
- 

## 3-2. Delete Profile

If you want to delete the User Profile, click “Delete” button. Then, the system will

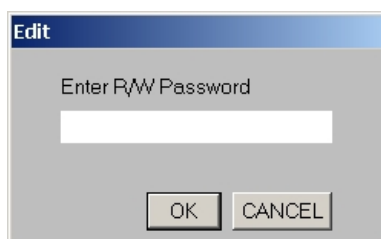
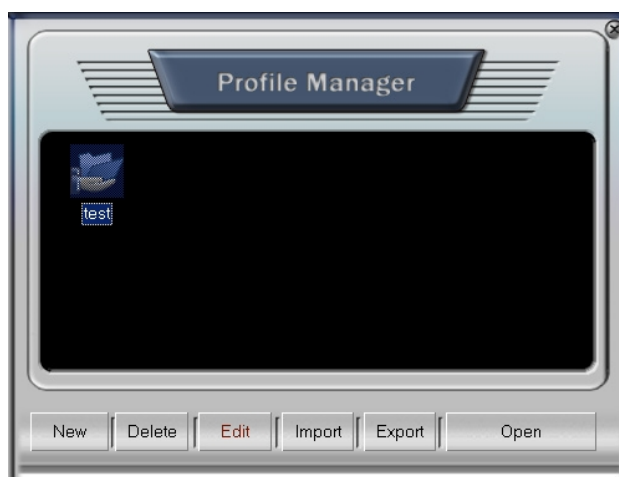


request you to enter the **Supervisor password**. Only supervision has the authority to delete the **Profile**.



### 3-3. Edit Profile

If you want to edit the **Profile**, just select it and click the “**Edit**”. The system will request you to enter the **Supervisor password**. Only supervision has the authority to edit the **Profile**. Therefore, enter the **Supervisor password**.

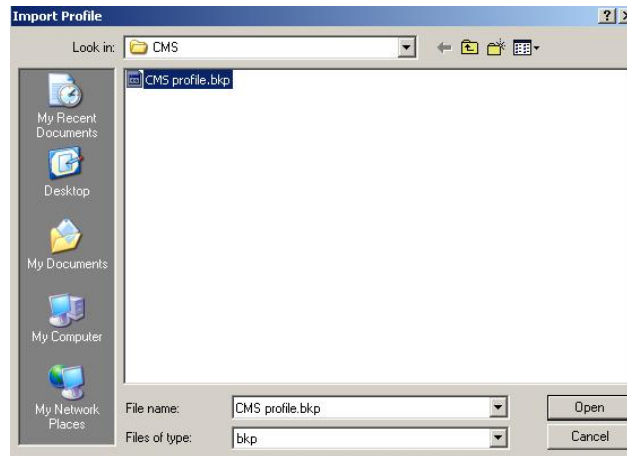


### 3-4. Import profile

You can import the backup profile to system. It's easy for copying the settings

between computers.

Click “Import” button, and select the \*.bkp file which you want to import. (**the file you have exported before**)



After importing file, the imported file will be added in the Profile Manager screen as following,



## 3-5. Export Profile

If you want to back up the profile or execute CMS on another computer but use the same profile, you can export the “Profile”.

Please choose the profile you want to export and click “**Export**” button.



The system will request you to enter “**Supervisor**” password. Enter the password and the address of the saved profile will show up. You can select the path to save the .bkp file which has just been exported, and it will appear on the appointed address.

## 3-6. Login

The user can choose the created **Profile**, enter the password and then start to login. There are two kinds of password identification-**Supervisor** and **User** password. Each one has different authority in CMS. The following is comparison tables of the authority.

	Profile Manager						Sequencer	Monitor Options
	New	Delete	Edit	Import	Export	Login		
<b>Supervisor</b>		○	○		○	○	○	○
<b>User</b>		×	×		×	○	○	×

	Quick Select Tag			Full Screen	Snapshot	Setup	System Status	Playback
	Save	Delete	Rename					
<b>Supervisor</b>	○	○	○	○	○	○	○	○
<b>User</b>	×	×	×	○	○	×	○	○

## 4. Main Screen

When you login the profile successfully, the following monitoring window will appear.

The screenshot shows the Main Screen monitoring window. It features a large grid of 64 'STOP' buttons (8 rows by 8 columns). To the right of the grid is a vertical sidebar containing several controls. At the top of the sidebar is a date and time display showing '2005-12-16 18:14:23'. Below this is a 'DVR List' section showing three entries: '[1] DVR-2', '[2] DVR-1', and '[3] DVR-3'. Further down is a 'Preview Window' section with a 'Full Screen' button, a 'Snapshot' button, and a 'Setup' button. Below these are buttons for 'Motion to Zoom', 'Playback', and 'E-MAP'. At the bottom of the sidebar are buttons for 'Display Mode' and 'Quick Select Tag'. At the bottom of the main window is a 'System status' section with a table of camera events and a 'Sequencer' section with a table of camera events.

Labels pointing to the interface elements:


- Exit
- Date & Time
- DVR List
- Preview Window
- Full Screen
- Snapshot
- Setup
- Motion to Zoom
- Playback
- E-MAP
- Display Mode
- Quick Select Tag
- System status
- Sequencer

NO.	DATE/TIME	DVR NO.	DEV NO.	TYPE	MESSAGE
1335	2005-12-16 18:13:46	2	13	Motion	DVR#2: Motion Event Detected on Camera[13]cam 13
1336	2005-12-16 18:13:46	2	14	Signal	DVR#2: No Signal on Camera[14]cam 14
1337	2005-12-16 18:13:46	2	14	Camera	DVR#2: Camera [14]cam 14 Enable
1338	2005-12-16 18:13:46	2	15	Camera	DVR#2: Camera [15]cam 15 Enable
1339	2005-12-16 18:13:46	2	16	Camera	DVR#2: Camera [16]cam 16 Enable
1340	2005-12-16 18:13:46	2	16	Motion	DVR#2: Motion Event Detected on Camera[16]cam 16
1341	2005-12-16 18:13:48	2	14	Signal	DVR#2: Signal success detect on Camera[14]cam 14

## 4-1 Main Screen

After finishing the DVR configuration (refer to 4-3 “**DVR setup**”), go back to Main Screen and it will show the following screen.



Click  button in front of the DVR in the window of **DVR List** and it will list all of the cameras connected to this Remote DVR. Click any listed camera and the screen of this camera will be displayed in the “**Preview Window**”. You can decide if you want to display this camera in the Spilt Window. If yes, just click this camera, **Drag** and **Drop** it to any spilt window you want to display. You can also **Drag** and **Drop** a group of cameras to the Left Spilt Window at one time. When clicking the right button of mouse on one of the DVR in the **DVR List**, it will show the following dialog box. Select “**Add to Monitor**” and there are four Group 1, 2, 3, and 4. Choose the Group you want to add at one time.



### 4-1-1 Zoom in/ Zoom Out Adjustment

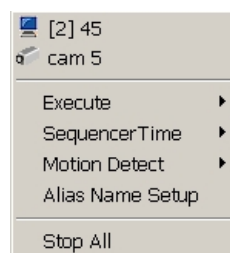
You can **Zoom in** or **Zoom out** any Spilt window. Double click on any split window and it will be enlarged to **Full Display mode**. You can double click again on this enlarged window and it will go back to the original spilt mode In **Full Display mode**, you can enter [+] or [-] to Zoom in or Zoom out the screen. There are ten display modes “ Full, 250%, 225%, 200%, 175%,150%, 125%, 100%, 75%, 50%”.



Full Display Mode

### 4-1-2 Camera Options

Click right button of mouse on any split window, the screen will appear the following list for camera options.

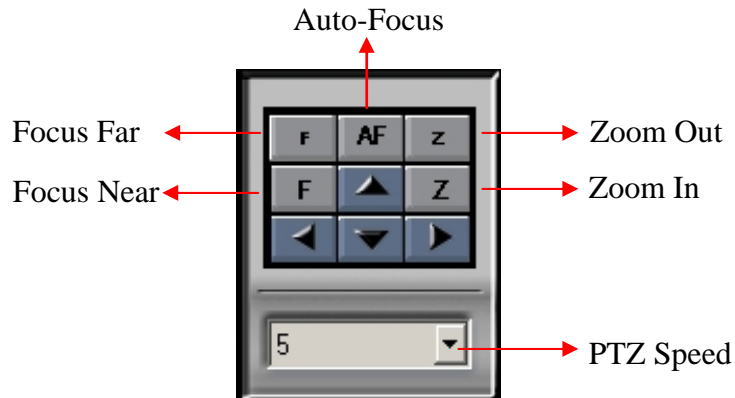


The following table is the description for each function.

Function	Description
Execute	-Enable: Enable to display the camera in the Spilt Window -Disable: Disable to display the camera n the Spilt Window
Sequencer Time	-Set up the Sequencer timer
Motion Detect	-Enable/Disable Motion Detection function.
Alias Name Setup	-Name the Camera Alias name

### 4-1-3 PTZ Camera

If remote DVR has PTZ camera connection, the PTZ control panel will pop up when the screen is displayed in **Full Display Mode**. PTZ controls include “Zoom In”, “Zoom Out”, “Focus Near”, “Focus Far”, “Auto-Focus”, and “PTZ Speed”.

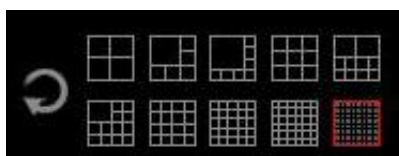


When user adjusts the PTZ control, it will not only change camera image but also effect the recording result. CMS can support 128 preset points.




## 4-2 Display mode

There are 10 kinds of Split modes and 3 kinds of Sequencer modes in display mode. These 10 kinds of Split modes are 4 splits, 6 splits, 8 splits, 9 splits, 10 splits, 13 splits, 16 splits, 25 splits, 36 splits, and 64 splits. The default option is 64 splits



## 4-2-1 Sequencer Mode

CMS provides three kinds of Sequencer Modes, 1- channel, 4- channel and

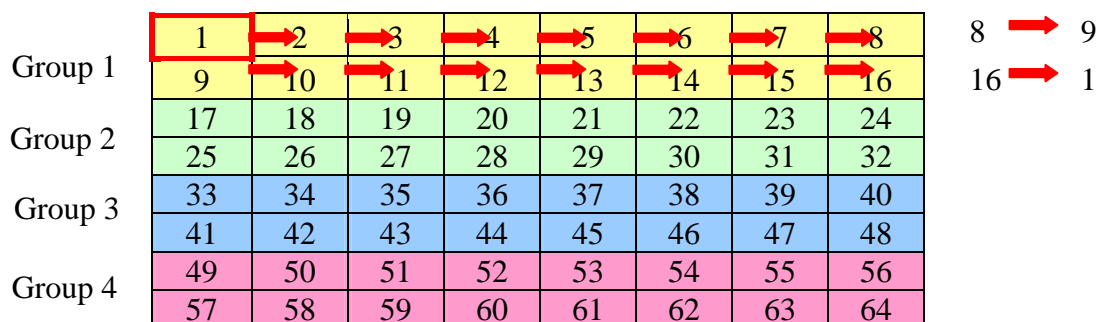
64-channel Sequencer. When you click Sequencer icon , it will show three options to let you select. However, 64-Channel Sequencer is just for TV Wall display. That is 64 channel sequencer option will not appear if TV Wall display function is not enabled.

When you select 1-channel sequencer mode, the screen will display sequentially from cam 1 to cam 64. You can set up Camera sequencer timer according to **4-1-2 Camera Option**. If any camera is disconnected, the sequencer will skip over it to the next connected camera channel,


When you select 4-channel sequencer mode, the Main screen will change to 4-split display mode. The 1<sup>st</sup> Split Window will display Cam 1 to Cam 16 sequentially, the 2<sup>nd</sup> Split Window will display Cam 17 to Cam 32 sequentially, the 3<sup>rd</sup> Split will display Cam 33 to Cam 48 sequentially and the 4<sup>th</sup> Split will display Cam 49 to Cam 64 sequentially. Please refer to the following two figures.

1st Split Window	Display Cam 1 to Cam 16 sequentially	Display Cam 17 to Cam 32 sequentially	2nd Split Window
3rd Split Window	Display Cam 33 to Cam 48 sequentially	Display Cam 49 to Cam 64 sequentially	4th Split Window





When you select 64-channel sequencer mode, these 64 cameras will be divided into 4 sequencer groups with different color based on Camera No.1-16, 17-32, 33-48, 49-64. Each sequencer group will play sequentially based on camera number. As above picture Group 1 (1-16 camera), it will proceed sequencer to play s from camera 1 to camera 64 with the red arrow order, the other groups will proceed in the same wa.

If you want to exit the sequencer mode, you can press “ESC” or click  to end the sequencer mode.


If the system can connect 4 monitors at the same time, it can export the images to TV-wall by utilizing 4- channel or 64-channel sequencer mode. The main screen will be unchanged, and the 4 monitors will play 4 channel sequencer image. Besides, it can map the main screen into TV-wall composed of 4 or many monitors.

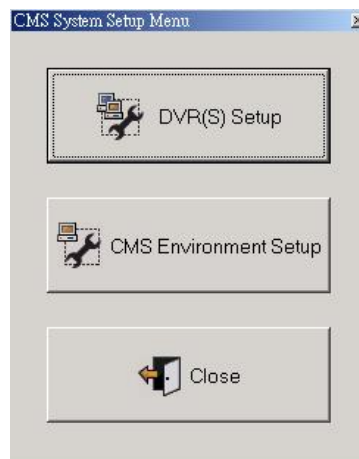
**Note:**

- 64 Channel Sequencer can be available when the products have TV-wall function and must be equipped with VGA card supporting TV-wall.

## 4-3 Setup



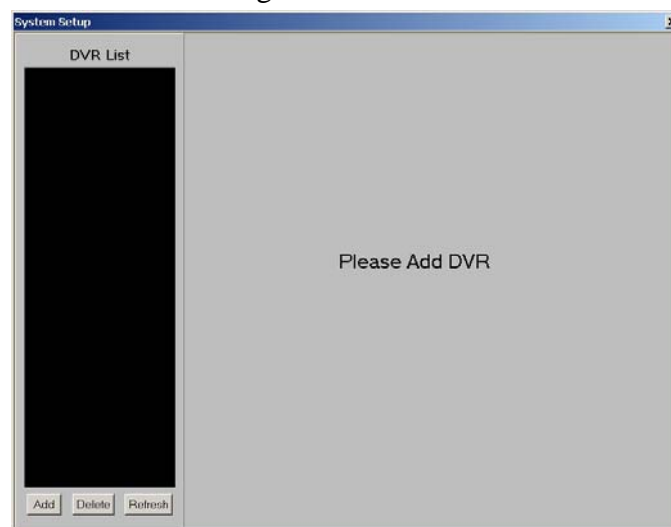
When you click the setup icon , you can see the following Setup menu.




### 4-3-1 DVR Setup

#### 4-3-1-1 DVR Configuration


Click **DVR Setup** button to set up the DVRs which you want to control from remote CMS. Then, it will show the following screen.



- **Add remote DVR**

Click  button to add new DVR which you want to control from CMS. The system will appear a dialog box to prompt you to enter “**DVR Name** “, “**IP Address**”, “**Port**”, “**Username**”and “**Password**”.

The DVR’s Name shown in the CMS doesn’t need to be the same with the remote DVR’s name. That means CMS Supervisor can create a new name for DVR in the CMS site. In addition, Supervision also can name the new names for all cameras connected to the remote DVRs in the CMS site. All of these new names are just for CMS site and it won’t change the names in DVR site.


A screenshot of a Windows-style dialog box titled "Add new DVR". It contains several input fields: "DVR name" (text box), "Address" (text box), "Port" (text box with "80" entered), "Username" (text box), "Password" (text box), "Confirm Password" (text box), "Network" (dropdown menu with "1M" selected), and "Quality" (dropdown menu with "High" selected). At the bottom are "OK" and "Cancel" buttons.


After finishing adding new DVRs, it will show the selected DVR information including connected cameras and DVR configuration when you point one of the DVR in the **DVR list**.

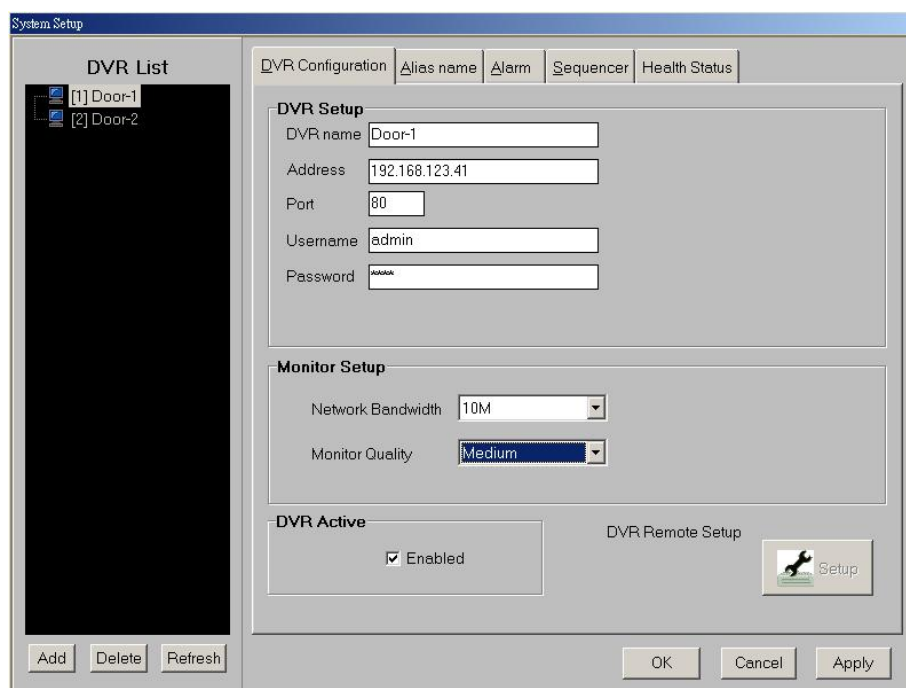
Besides, you can adjust network speed based on real speed status, just click “ 56k”, “128k”, “256k”, “512k”, “768k” and “10M” for adjustment on the ComboBox. If you use company’s or school’s LAN, we suggest you can choose “ 10M” for quick display. For ADSL , Cable Modem , and Dial-up service , please adjust the setup based on real ISP speed.

You also can adjust the image quality, just click “low”, “Medium”, “High” modes for adjustment on the ComboBox .We suggest you choose “High” for higher image Quality. However higher quality will occupy more system resources, network bandwidth, and it will result in low display speed.

Each DVR has remote monitor function. If you want to execute remote monitor,

please tick “ Enable” in the . If you don’t need it, please just get rid of the “ Enable” button.

After finishing the setup or modifications, click  button to save the DVR changes.





- **Delete Remote DVR**

You can also delete any remote DVR controlled in CMS. Just select the DVR in


“ **DVR List**” which you want to delete and then click  button.

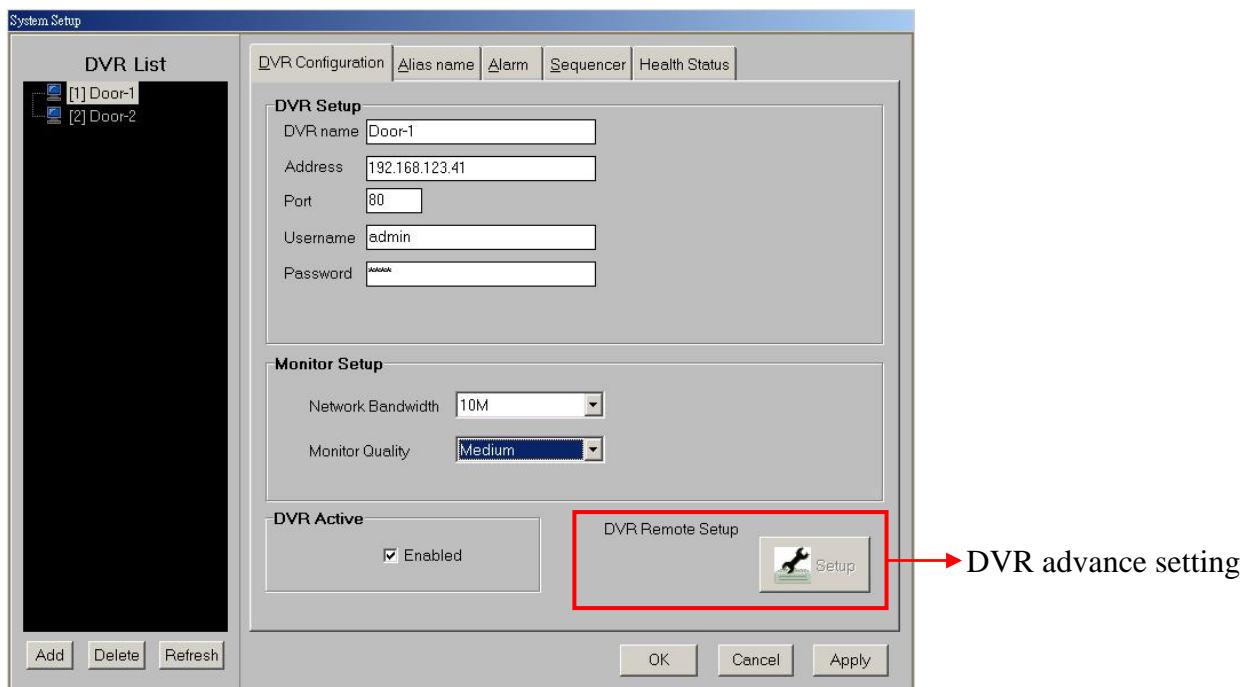
- **Refresh remote DVR**

After modifying DVR configurations, you can click **Refresh**  button to update the configurations. CMS will keep the latest setup status automatically. If there is any remote DVR disconnected, the system will show it as disconnected status  in DVR List.




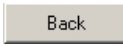
- **DVR Remote Setup**

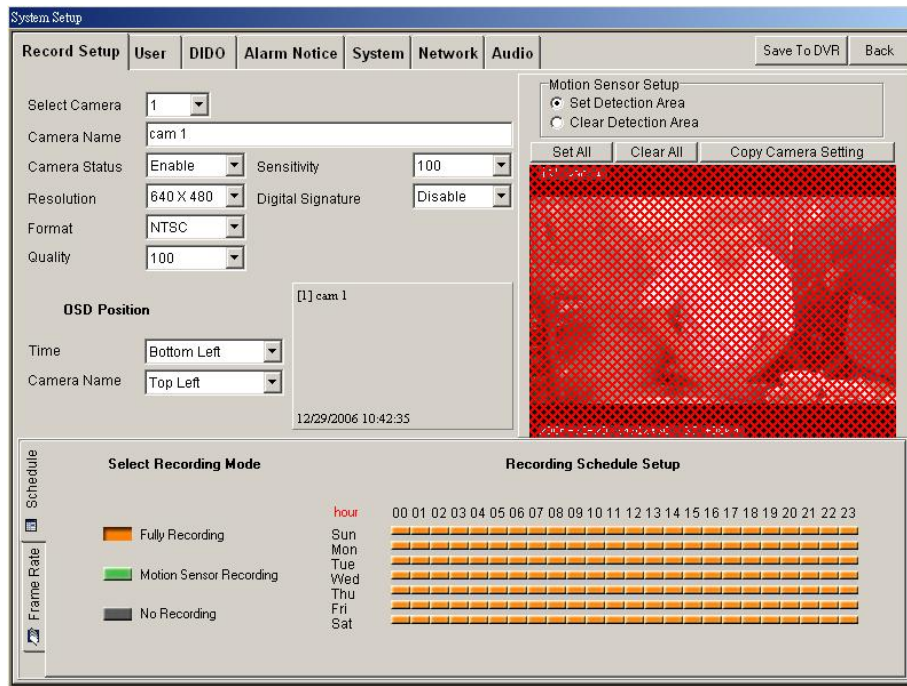
You can click Setup icon  to have the remote DVR configuration in detail. However, you should verify if “Remote Setup” function in DVR site has been enabled. (Please refer to DVR user manual to “Enable” the “**Remote Setup**” function)  
All of the remote setup functions are similar to the DVR system configurations.



When you click setup icon , it will show the following screen.

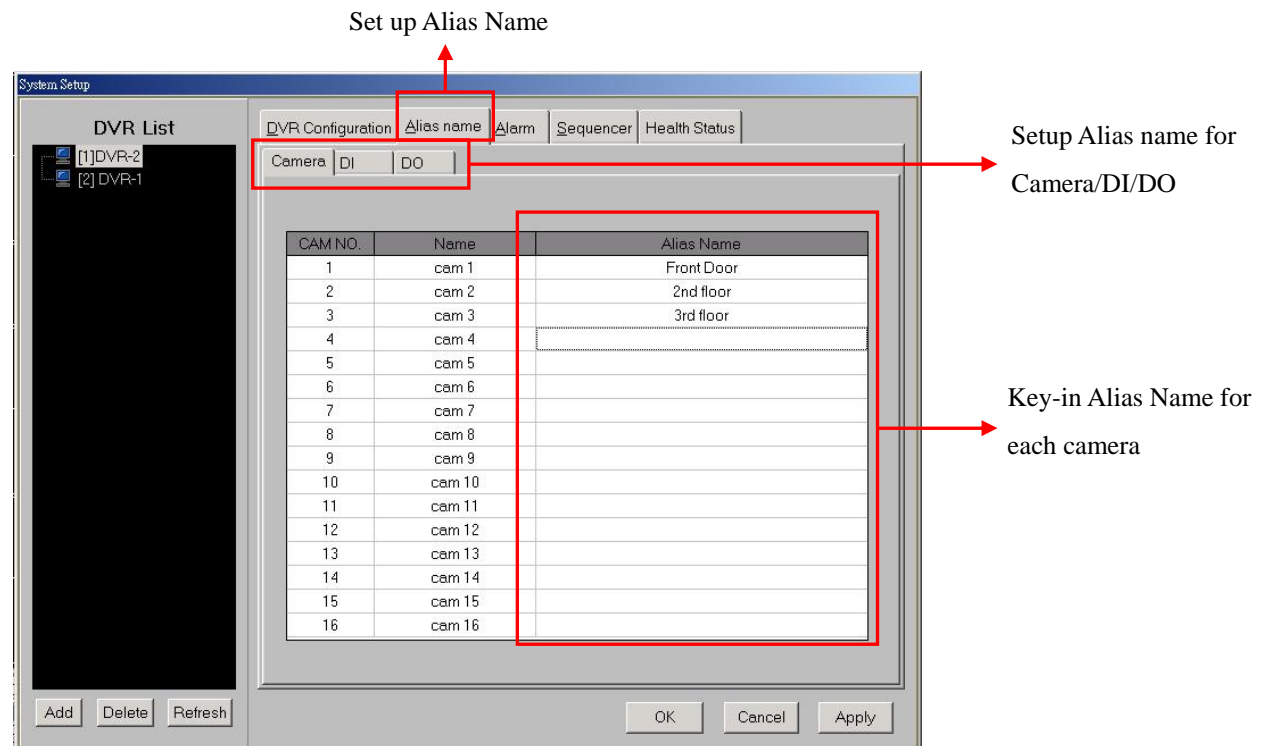
You can have the “**Record Setup**”, Create or Edit “**User**” account, “**DI/DO**” setup, “**Alarm Notice**”, “**System setting**”, “**Network status**”, “**Audio**” and **Environment**”.

Please refer to **DVR User Manual** to have detail setup for each items. After you finish the remote setup, click  button and press  button to exit the remote setup mode.



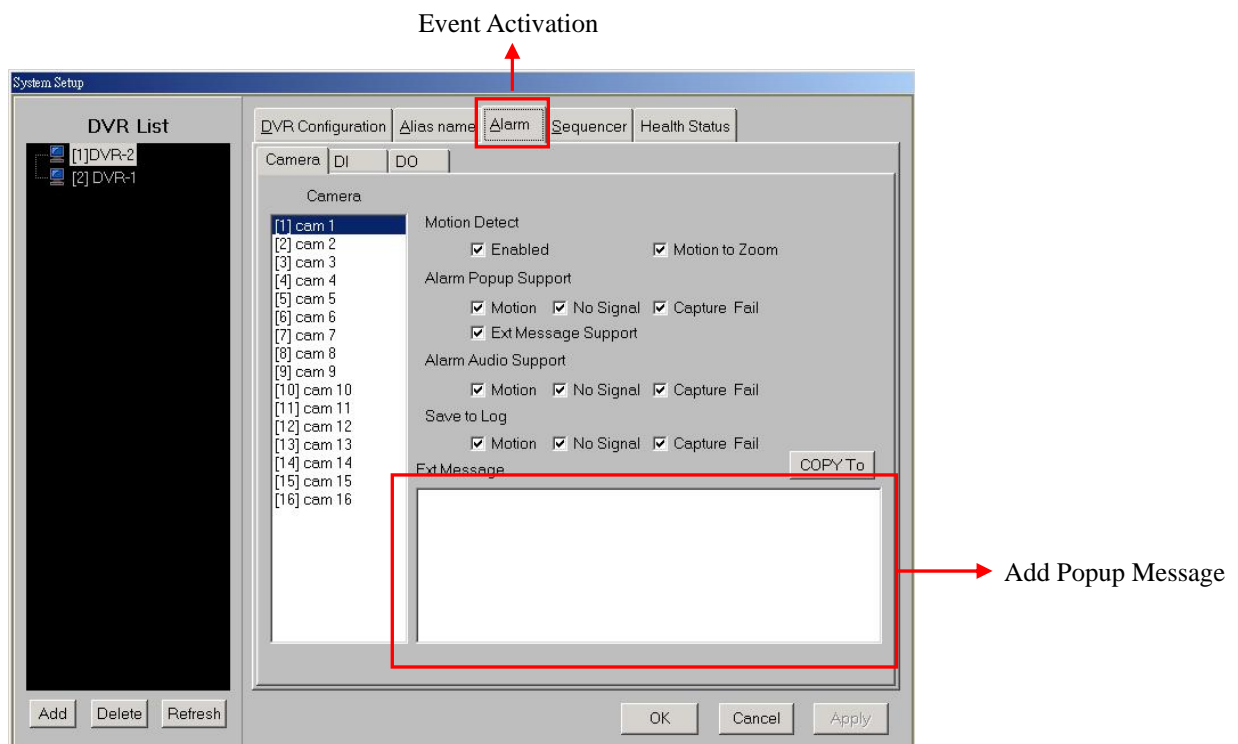
#### 4-3-1-2 Alias Name

You can click the button of “Alias name” to set up Alias name for camera, DI and DO. After you key in alias name for each camera, DI and DO, click “Apply” to save the names which you have set up.



### 4-3-1-3 Event Activation

CMS provides three kinds of alarm notifications, “Alarm Popup”, “Alarm Audio” and “Motion to Zoom” when the events are activated from Camera, DI and DO.



#### ■ Camera Event configuration:

- Motion Detect:
  - ✓ Enabled
  - ✓ Motion to Zoom
- Alarm Popup Support
  - ✓ Motion
  - ✓ No Signal
  - ✓ Capture Fail
  - ✓ Ext Message Support

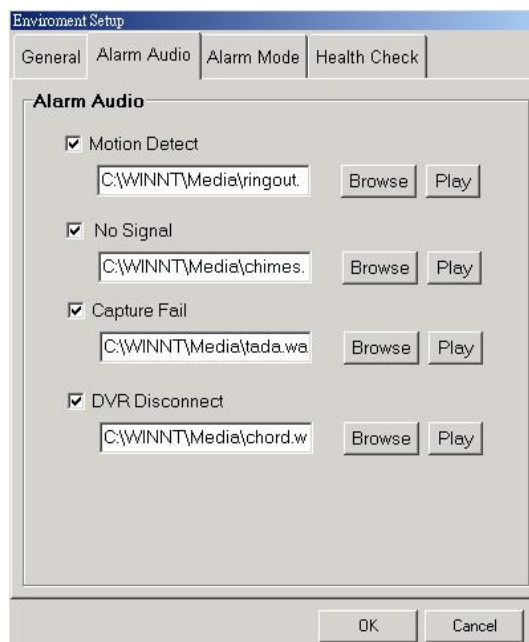
When there is a motion or no signal or capture fail event occurring, you can enable “Popup message” to remind “**Administrator**” there are events occurring.

You can define “Popup message” by yourself in “Ext Message column”, for example, contact information, address, etc.

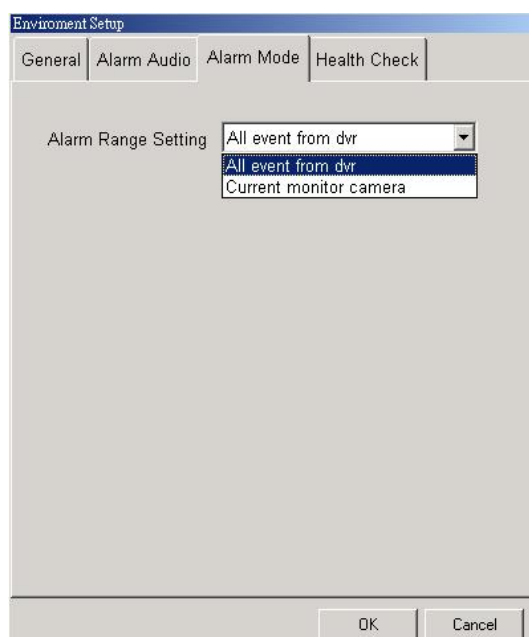
- Alarm Audio Support
  - ✓ Motion
  - ✓ No Signal
  - ✓ Capture Fail

When there is a motion or no signal or capture fail event occurring, you can enable “Alarm to Audio” to remind “**Administrator**” there are events occurring.

You can define the music you want to play when the event occurs. Go to the “**Environment Setup**”(Please refer to the 4-3-2 CMS Environment Setup) and click “**Alarm Audio**” to set up the music you want to play for different event.



You can also set up the Alarm Mode. The alarm configuration are applied for “All event from DVR” or Current monitor camera”



- Save to Log



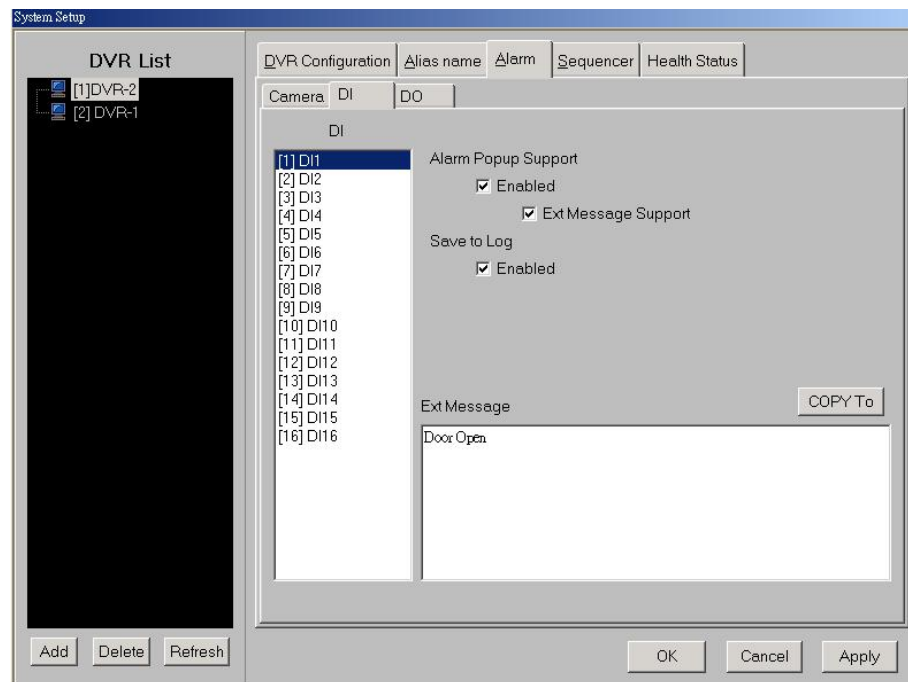
- ✓ Motion
- ✓ No Signal
- ✓ Capture Fail

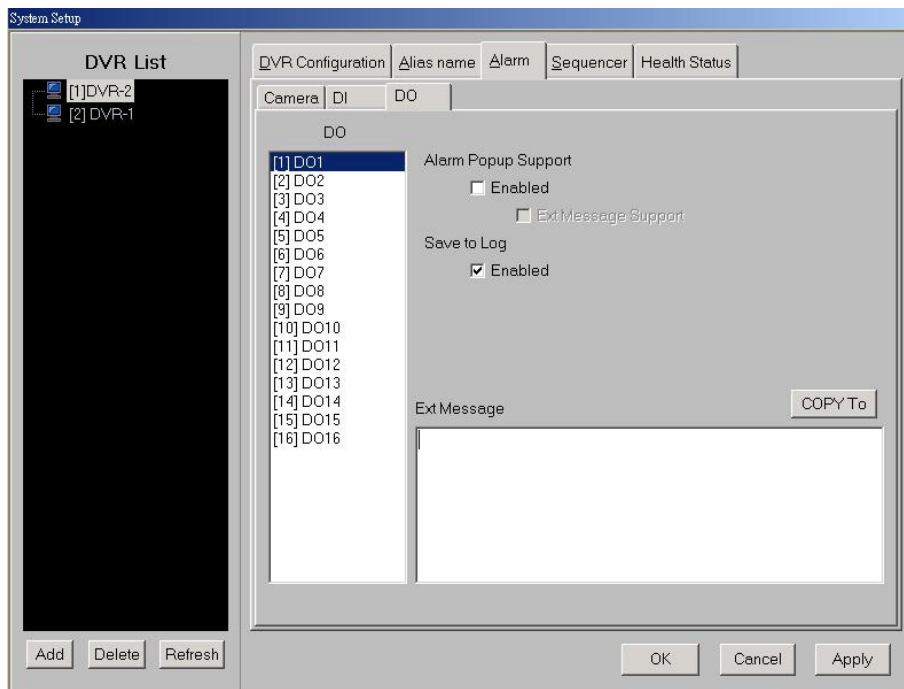
Save the event to Log so that Administrator can look up any time.

#### ■ DI/DO Event configuration:

- Alarm Popup Support:
  - ✓ Enabled
    - ◆ Ext Message Support
- Save to Log
  - ✓ Enabled

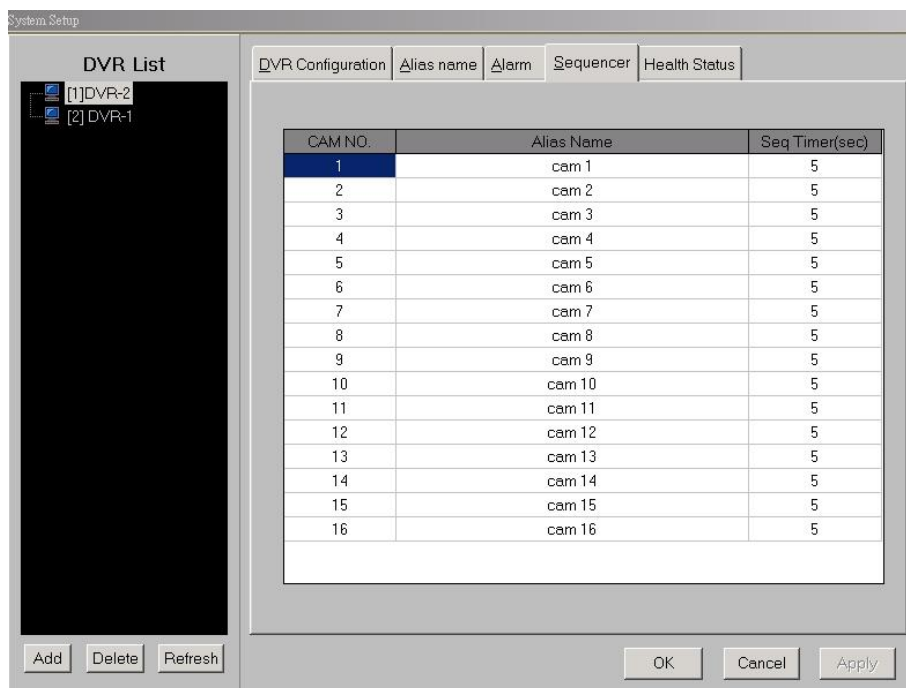
When there is DI or DO event occurring, you can enable the “Alarm Popup message” and define the “Popup message.”





#### 4-3-1-4 Sequencer

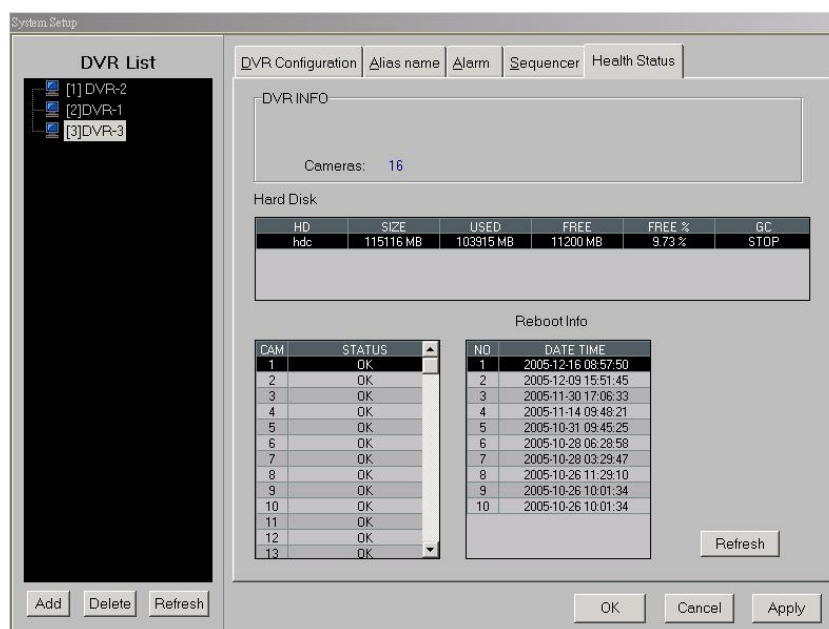
You can set up the display duration for individual camera.



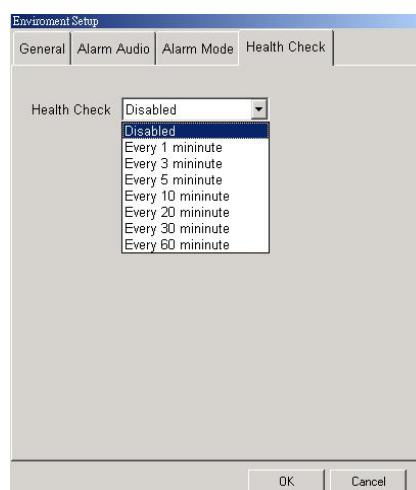
#### 4-3-1-5 Health Check

DVR Ver 3.6 and above can support Health Check function.


There are two ways to get the DVR health status including Camera Status, HDD status and Reboot Info. One is from the “Health Status” function in **DVR Setup** and the other one is CMS system automatically checks the DVR health status and save these health information in the database which can provide external applications for usage.

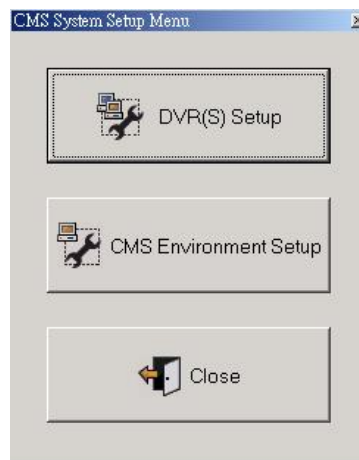


Go to the “**Environment Setup**”(Please refer to the 4-3-2 CMS Environment Setup) and click “**Health Check**” to set up the “Disabled health check” or “the frequency of Health check. If you select CMS system automatically checks the DVR health status, the health information will be saved in the database.

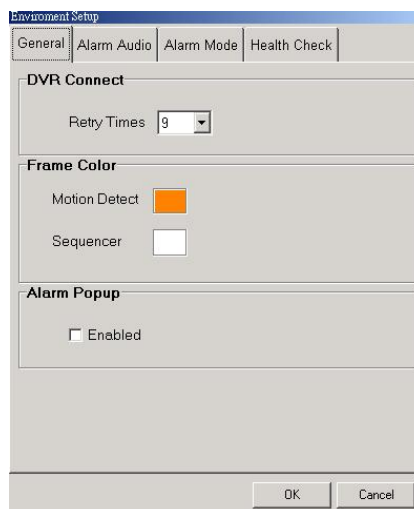


## 4-3-2 CMS Environment Setup

When you click the setup icon , you can see the following Setup menu.



Click “CMS Environment Setup” to proceed CMS Environment Setup.



- **DVR Connect--- Retry Times**

You can set up **Retry Times** for DVR reconnection. If DVR is disconnected, CMS will try to reconnect to the remote DVR actively. The number of reconnection is the one you set in the “**Retry Times.**”

- **Frame Color**

- ✓ Motion Detection: When motion occurs, the frame of the motion channel will be marked with the color you set up here.
- ✓ 64 Channel Sequencer: In the 64 Channel Sequencer mode, the frame will be marked with the color you set up here.

- **Alarm Popup**

Enable or disable “alarm popup” function.

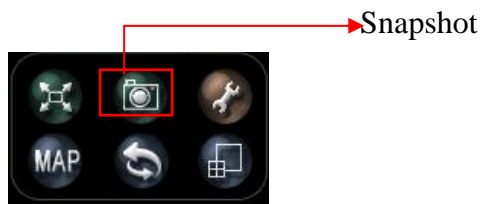
**Note**


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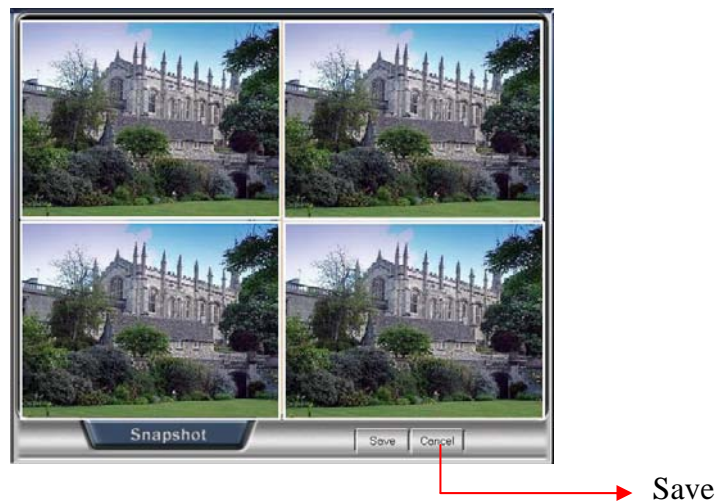
64 Channel Sequencer mode just can be activated when CMS system is installed VGA card with TV wall function.

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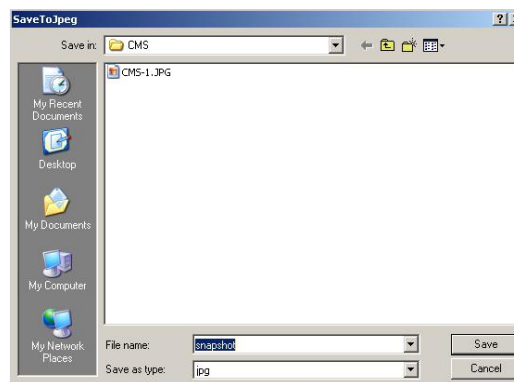
## 4-4 Snapshot



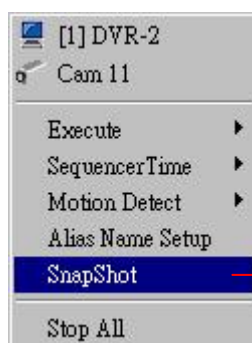
When clicking the left button of the mouse on the snapshot icon , you can capture the image of whole screen.



Click “Save” and it will show the following dialog box. Select the folder you want to save the Snapshot picture and click “**save**”. The file is JPEG format.



If clicking the right button of the mouse on any split channel, a menu with snapshot function will be popped up. Select “Snapshot” and it will capture the single split channel which you click on.




Snapshot single channel

## 4-5 Full Screen




Full Screen

Click the “Full Screen icon” , you can enlarge any monitor to full screen. If you want to go back to main monitor screen, please press the “Space” to get back.

## 4-6 Motion to Zoom



Motion to Zoom

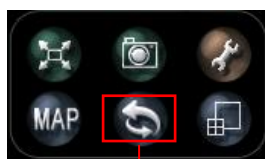
If you turn on the “ Motion Detect”(Refer to 4-1-2 Camera Option) and click Motion to Zoom , the system will activate “ Motion to Zoom” function. You can change the Frame color of camera when motion occurs (Refer to 4-3-2 CMS Environment Setup). The mode of **Motion to Zoom** will be displayed in 13 split window. The latest motion will be always zoomed in Motion Zooming Area. If there is 2<sup>nd</sup> motion happening, it will replace 1st motion which was zoomed in **Motion Zooming Area**. Then, 1st motion will be put on the 1st split window. As this rule, if there is 3<sup>rd</sup> motion happening, 3<sup>rd</sup> motion will be zoomed in “ Motion zooming Area”, the 2<sup>nd</sup> motion will be put on 2<sup>nd</sup> Spilt Window. As this result, when the 14<sup>th</sup> motion happens, the 13rd

motion will be put on 1<sup>st</sup> Split Window and repeat this rule.


Motion Zooming Area (Latest Motion)		1 <sup>st</sup> Spilt Window	2nd
		3rd	4 <sup>th</sup>
5th	6th	7th	8 <sup>th</sup>
9th	10th	11th	12th



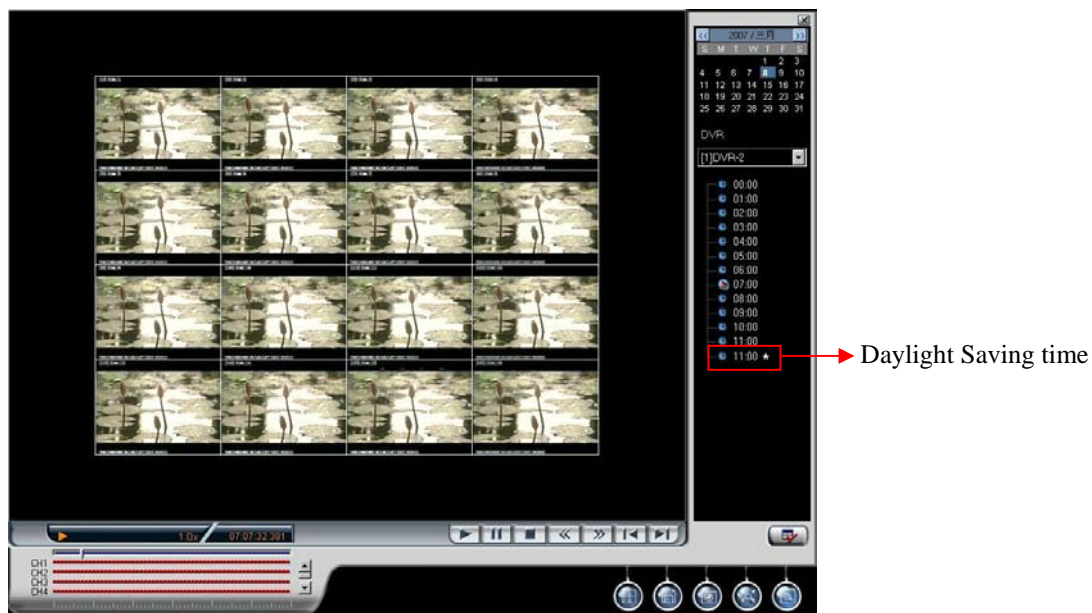
## 4-7 Playback





Playback

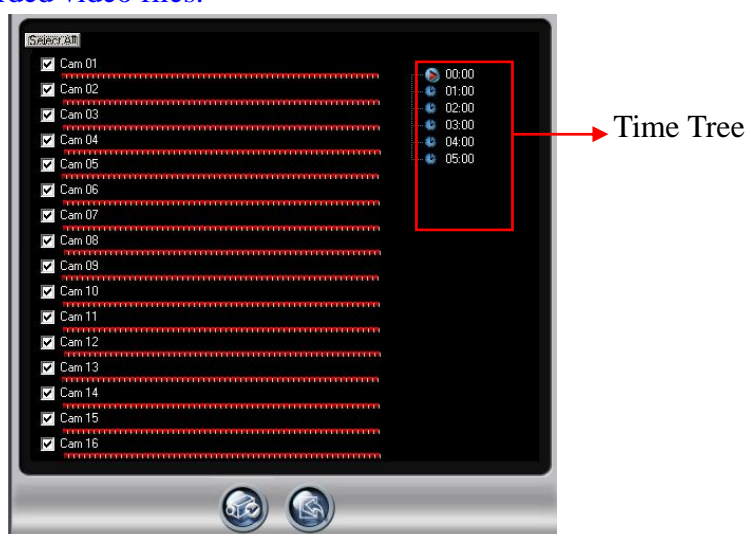
If you want to see the recording video, click the playback button  to see the following screen.









### [Start to Playback]

- (1) Select a date on the calendar.
- (2) Click  button to select playback split mode. There are 1,4 and 16 channel split modes.
- (3) Click  button to select the playback channels and it will show the following Window to let you to select the playback channels. You can individually tick the cameras which you want to playback. After selecting the playback channels, select the time slot which you want to playback in the “Time Tree window. In the Time Tree Window”, it will list all of the time slots with recorded video files.



- (4) Click  to save the configuration and start to playback according to the new configuration.
- (5) CMS V1.62 and above version supports playing the recording data recorded in the Daylight saving time. If the recording data recorded in the daylight saving time, it will be marked a star ★ symbol in the right side.




### [Download Files]

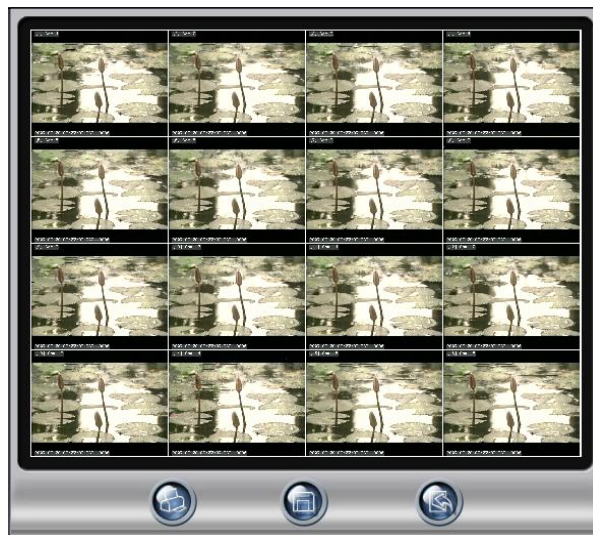
Click  button to download files and the following “**Download Window**” will appear. It will show all of the video files which are being played in playback main window for user to download. When you click different camera, the played file in this camera will be ticked. You can also click “**Select None**” or **Select All** to quickly select the download files. After finishing the selection, click  button to start to download files or click  to exit to playback main window.



→ Download file window

### [Snapshot]

Click  button to show the **Snapshot Window**. If you don't want to print or save certain picture, you just click on that channel to “Hide” the screen. You can click the channel again to “Show” the screen. Click  button to print the snapshot pictures per channel per sheet by 320\*240 resolution or click  button to save the snapshot pictures as JPEG files.



→ Snapshot window

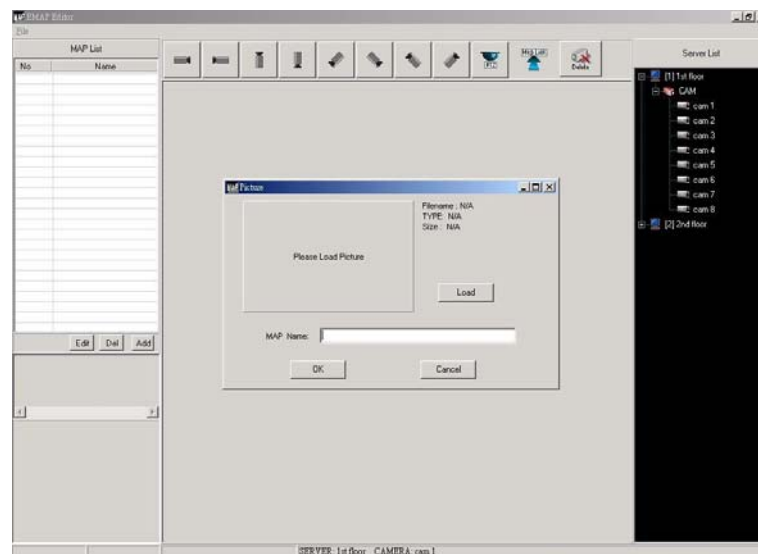
-  Rewind Speed (—): To reduce the playback speed (0.5X, 0.2X and 0.1X).
-  Forward Speed (+): To increase the playback speed (1.5X, 2.0X, 4X and 8X).
-  Playback
-  Previous 1 min: To rewind 1 minute.
-  Next 1 min: To forward 1 minute.
-  Pause
-  Stop
-  Select playback split mode (1, 4 and 16 channel split)
-  Save video clips (Download files)
-  Save JPEG files (Snapshot)
-  Enlarge to full screen
-  Adjust video size. There are 4 kinds of Zooming mode, 100%, 200%, Wide mode and Fit to Window.
-  Select playback channels.

## 4-8 E-MAP



EMAP

Before you start to enable the EMAP function in CMS, you need to build up the EMaps in EMAP Editor. Click “ Start” on your Windows taskbar, select “ Programs” and then find the folder of “ CenterManager”. In this folder, please click the “E-MAP Editor” to execute the editor and it will show the following dialog box..

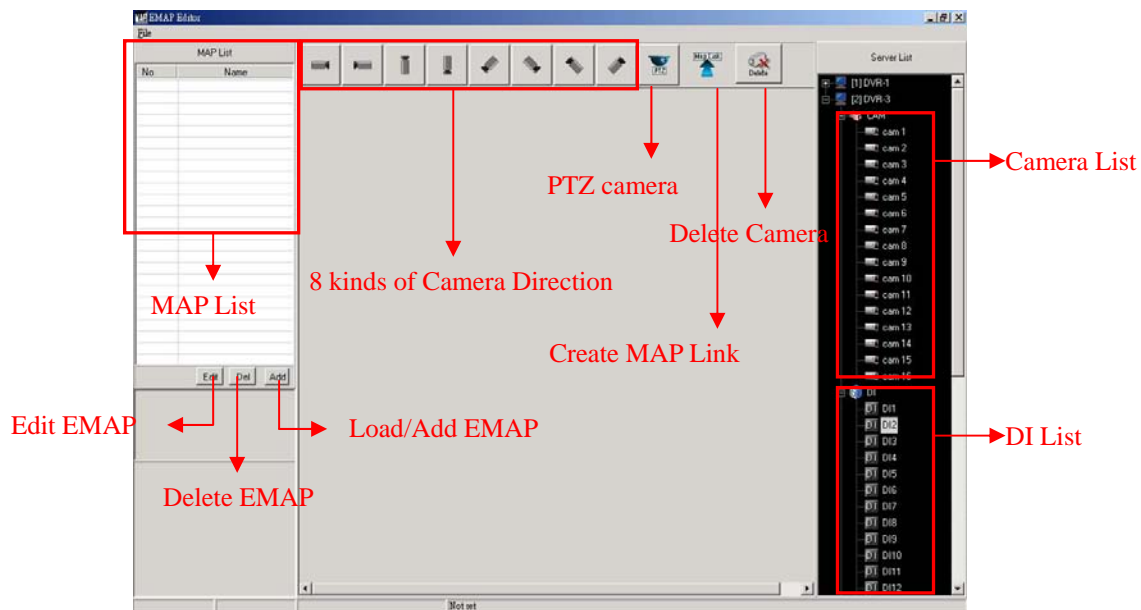


Please select the CMS User Profile which you want to have EMAP function and enter the password to open the EMAP Editor (Only the administrator is authorized to create the E-MAP). Once you set up the EMAP profile in the EMAP Editor, you can start to use EMAP function in CMS manager. You just click EMAP icon in the CMS main menu.

### 4-8-1 EMAP Editor

When you successfully open the EMAP Editor, you can start to build your EMAP. EMAP Editor provides the functions that enable user to set up the locations of Cameras in the E-Map to help the administrator to have the connection between camera and Map. The MAP supports hierarchy structure and can let administrator


easy to manage the remote cameras and DVRs.

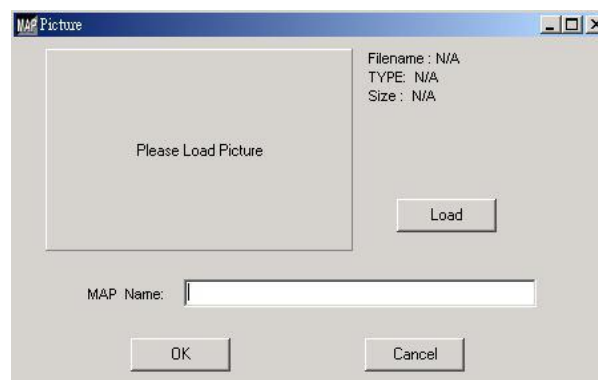



- EMAP Format
  - ✓ Map should support JPEG or BMP format.
  - ✓ The size of map should not exceed 1024\*768.

## • Create EMAP

### Step 1 Load/Add EMAP:

Click “Add” icon  to load MAP into the E-MAP Editor and it will show the following dialog box.



Click “Load” icon  and it will show the following dialog box. Select the MAP you want to **Load** and click open.

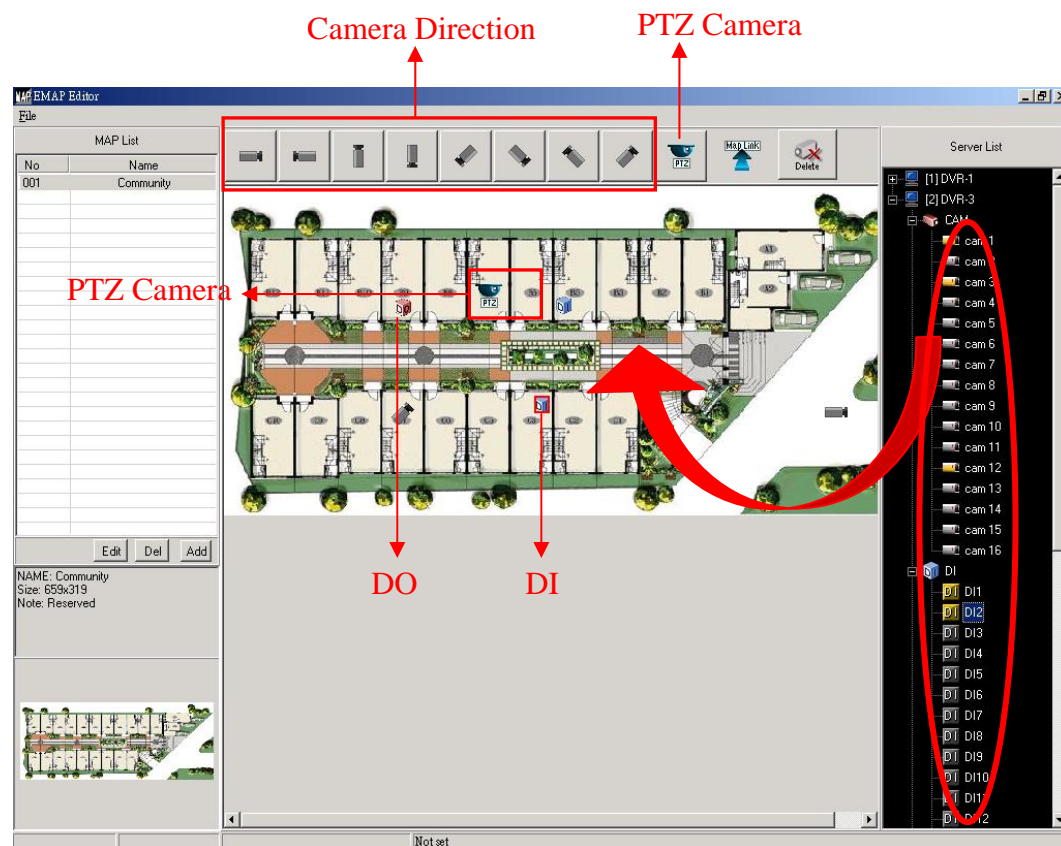




## Step 2 Add Cameras/DI/DO in the MAP

“Drag and Drop” the cameras, DI or DO from the right window of Server List to the MAP. You can decide the camera, DI or DO location in the MAP. To adjust the camera direction, you can click the one of 8 Camera Directions you want and the picture of camera on the MAP will change the direction immediately. You can also change the Camera in the MAP to PTZ Camera. Just click one of the camera in the MAP and this camera will be marked in a **Red Frame** to show the **Selected** status. Then, click PTZ camera icon and the selected camera will be changed to PTZ camera.

You can delete the camera in the MAP by clicking the **Delete** icon

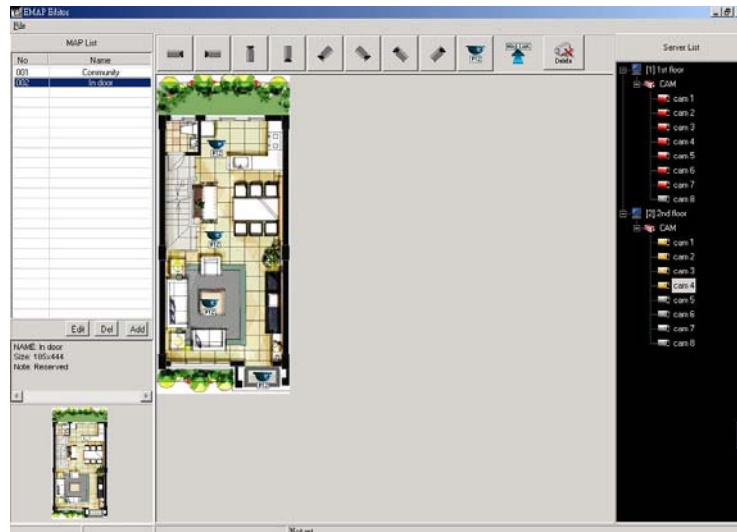


### Note:

- The Camera, DI and DO icons shown in gray color mean that the camera, DI and DO haven't been set up.
- The Camera, DI and DO icons shown in yellow color mean that the camera, DI and DO have been set up in this map.
- The Camera, DI and DO icons shown in red color mean that the camera, DI and DO have been set up in other map.
- One camera or DI or DO just can be set up one time.

### Step 3 MAP Link

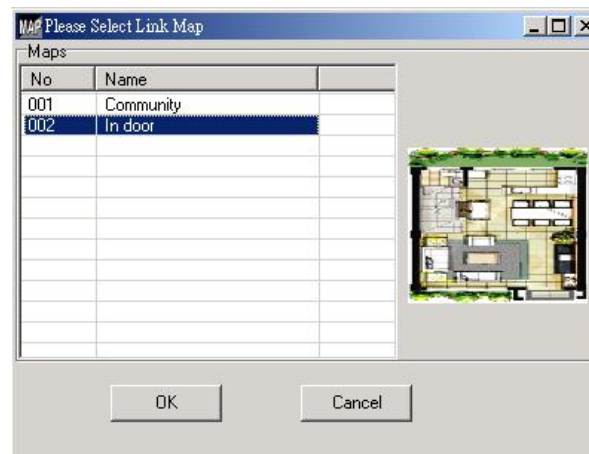
You can build another detail map for the specific area and make connection between these two MAPs. Just **Add** MAP and Drag and Drop cameras as Step 2 and the second MAP will show on the MAP List. You can switch the MAP by click the MAP name shown on the MAP list.



To build the connection between two MAPs, just Drag and Drop the MAP Link icon



to the location of Major MAP and it will show the following dialog box. Click the Detail MAP you want to link and click “OK”. Then, the MAP Link is completed.



You can build more MapLinks in the Major MAP as the above method. However, You can't build the MAP Link if only one map exists or the following dialog box will appear to remind you to add additional MAP.






#### Step 4 Save the EMAP

Once you finish building the EMAP, please make sure to save the settings by clicking the “**Save**” in the file in the left upper corner of Window and click Exit to escape the EMAP Editor.




If you want to delete the MAP, click the Delete icon . However, you need to delete all of the cameras in this MAP before you can delete this MAP.

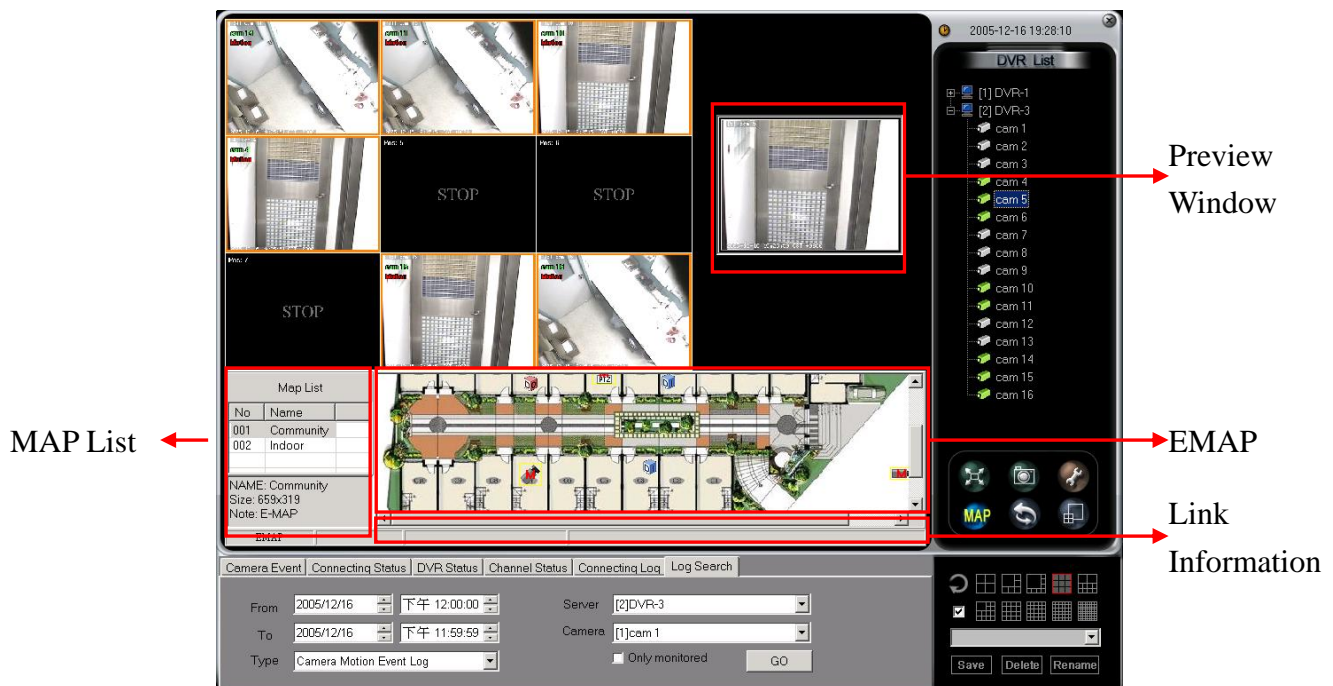


You can also edit this EMAP by clicking the Edit icon .

## 4-8-2 EMAP Operation

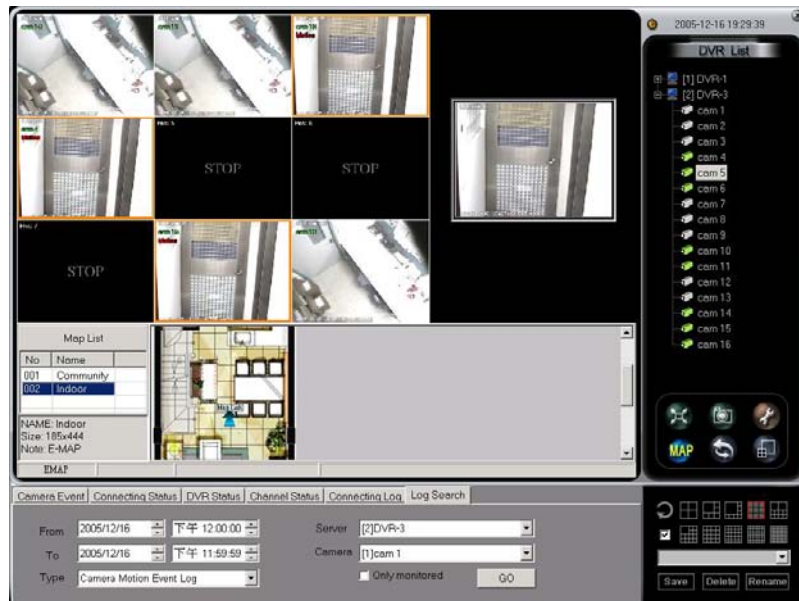
When you finish building or editing an EMAP, you need to login to the CMS again to reload the new EMAP in the CMS.

Click the EMAP icon  in the CMS to activate the EMAP function in the CMS and then you can see the following screen.



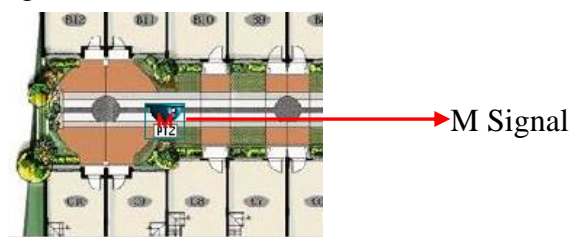
Click any camera in the MAP and you can see the camera image shown in the Preview window. Then, Drag and Drop the image from the Preview window to any Spilt window you want to monitor.

When you click left button of mouse on the Map Link icon shown on the EMAP, you can see the Link location in the Link Information area. When you click right button of mouse on the MAP Link, it will jump to the linked MAP.



The Map List window will be hidden when there is only one map in EMAP profile.

There will be a “M” signal shown on the camera when the motion happens. If camera is no signal, “NS” signal will be shown on the camera.

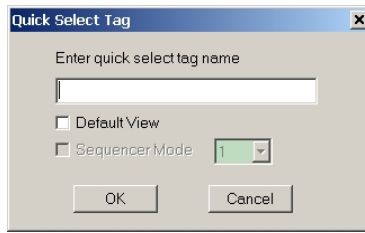


## 4-9 Quick Select Tag

User can define the configuration of Quick Select Tag from the ten options. It means that the selected split windows for each DVR and camera at any split mode can be saved for next time use. With this Quick Select Tag, you can switch to split window fastest and more convenient.


### 4-9-1 Save Quick Select Tag

You can save your own Quick Select Tag by clicking **Save**. Then, enter the name of the Quick Select Tag in the following dialog box. and press “OK” to finish saving.




You also can select “Default View” in advance, and you can use the selected option whenever you initialize the CMS and Auto-Login.

## 4-9-2 Delete Quick Select Tag

If you want to remove the unnecessary selected options, please select the Quick Tag you want to delete on the combobox, and press  to delete the Tag.



## 4-9-3 Rename Quick Select Tag

You can click Rename icon  to rename the name of Quick Select Tag. .

## 4-10 Log System Status Window

You can see the DVR status from the Log System Status Window.

Camera Event	Connecting Status	DVR Status	Channel Status	Connecting Log	Log Search
NO.	DATETIME	DVR NO	DEV NO	TYPE	MESSAGE
192	2005-12-16 18:35:17	2	16	Motion	DVR#2: Motion Event Detected on Camera:[16]cam 16
193	2005-12-16 18:35:24	2	11	Motion	DVR#2: Motion Event Stop on Camera:[11]cam 11
194	2005-12-16 18:35:26	2	11	Motion	DVR#2: Motion Event Detected on Camera:[11]cam 11
195	2005-12-16 18:35:35	2	16	Motion	DVR#2: Motion Event Stop on Camera:[16]cam 16
196	2005-12-16 18:35:35	2	16	Motion	DVR#2: Motion Event Detected on Camera:[16]cam 16
197	2005-12-16 18:35:39	2	14	Motion	DVR#2: Motion Event Stop on Camera:[14]cam 14
198	2005-12-16 18:35:39	2	14	Motion	DVR#2: Motion Event Detected on Camera:[14]cam 14

- **Camera Event:** show the cameras with motion events.
- **Connecting Status:** show all DVR connecting status.
- **DVR Status:** show DVR status.
- **Channel Status:** show each channel status.

- **Connecting Log:** show each connecting log.
- **Log Search:** Search the event log

You can query the events according to time, event type, time, camera and DVR.

The screenshot shows a 'Log Search' window with the following fields:

- From:** 2005/12/16 下午 12:00:00
- To:** 2005/12/16 下午 11:59:59
- Type:** Camera Motion Event Log
- Server:** [1]DVR-1
- Camera:** [1]cam 1
- ☐ Only monitored
- GO** button

Set up Event type, Time, Camera and DVR and click “Go” to list all of the event logs which are within the conditions you set up.

Select one of the event log and click “**Playback**” to playback the video of this log which you query directly.

The screenshot shows a 'Query Log' window with a table of events. The table has three columns: Date Time, Event Type, and Message. The first column is highlighted. Below the table, there is a 'TOTAL COUNT: (1/19)' and a 'Refresh' button. To the right of the table, there is a 'Playback' button highlighted with a red box. An arrow points from the text 'Select the log and click playback' to the 'Playback' button.

Date Time	Event Type	Message
2005/12/16 下午 06:40:05	DVR	DVR#2: Motion Event Detected on Camera:[1]cam 1
2005/12/16 下午 06:40:05	DVR	DVR#2: Motion Event Stop on Camera:[1]cam 1
2005/12/16 下午 06:39:47	DVR	DVR#2: Motion Event Detected on Camera:[1]cam 1
2005/12/16 下午 06:39:46	DVR	DVR#2: Motion Event Stop on Camera:[1]cam 1
2005/12/16 下午 06:38:25	DVR	DVR#2: Motion Event Detected on Camera:[1]cam 1
2005/12/16 下午 06:38:25	DVR	DVR#2: Motion Event Stop on Camera:[1]cam 1
2005/12/16 下午 06:38:15	DVR	DVR#2: Motion Event Detected on Camera:[1]cam 1
2005/12/16 下午 06:38:16	DVR	DVR#2: Motion Event Stop on Camera:[1]cam 1
2005/12/16 下午 06:38:06	DVR	DVR#2: Motion Event Detected on Camera:[1]cam 1
2005/12/16 下午 06:38:05	DVR	DVR#2: Motion Event Stop on Camera:[1]cam 1
2005/12/16 下午 06:34:36	DVR	DVR#2: Motion Event Detected on Camera:[1]cam 1
2005/12/16 下午 06:34:36	DVR	DVR#2: Motion Event Stop on Camera:[1]cam 1
2005/12/16 下午 06:34:12	DVR	DVR#2: Motion Event Detected on Camera:[1]cam 1
2005/12/16 下午 06:34:11	DVR	DVR#2: Motion Event Stop on Camera:[1]cam 1
2005/12/16 下午 06:33:56	DVR	DVR#2: Motion Event Detected on Camera:[1]cam 1
2005/12/16 下午 06:33:57	DVR	DVR#2: Motion Event Stop on Camera:[1]cam 1
2005/12/16 下午 06:30:35	DVR	DVR#2: Motion Event Detected on Camera:[1]cam 1
2005/12/16 下午 06:30:34	DVR	DVR#2: Motion Event Stop on Camera:[1]cam 1
2005/12/16 下午 06:29:41	DVR	DVR#2: Motion Event Detected on Camera:[1]cam 1

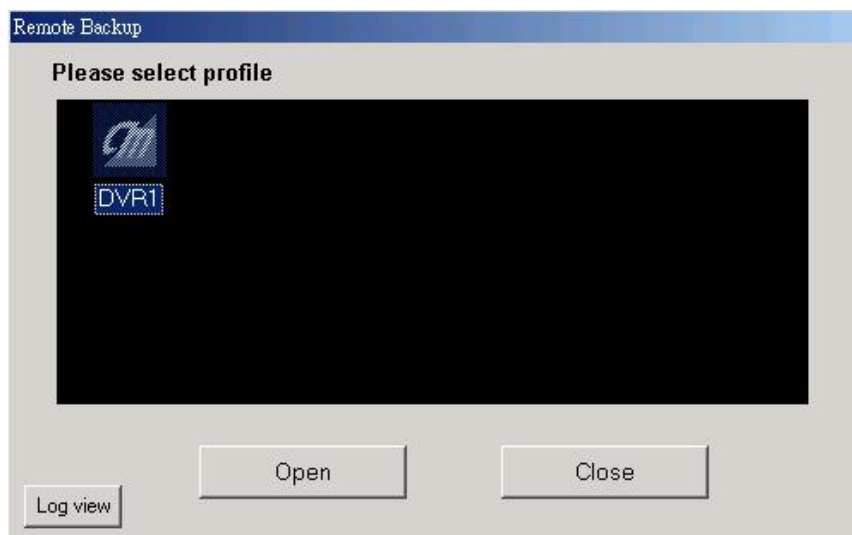
Select the log and click playback

## 4-11 Central Backup

**CMS Central Backup** function enables administrator to back up local DVR files from remote side. Administrator just needs to select the camera, time and storage device and then can execute backup.

### 4-11-1 Execute Central Backup program

Click “Start” on your Windows taskbar, select “Programs” and then find the folder of “CenterManager”. In this folder, please click the “**Central Backup**” to execute backup program and it will show the following dialog box.

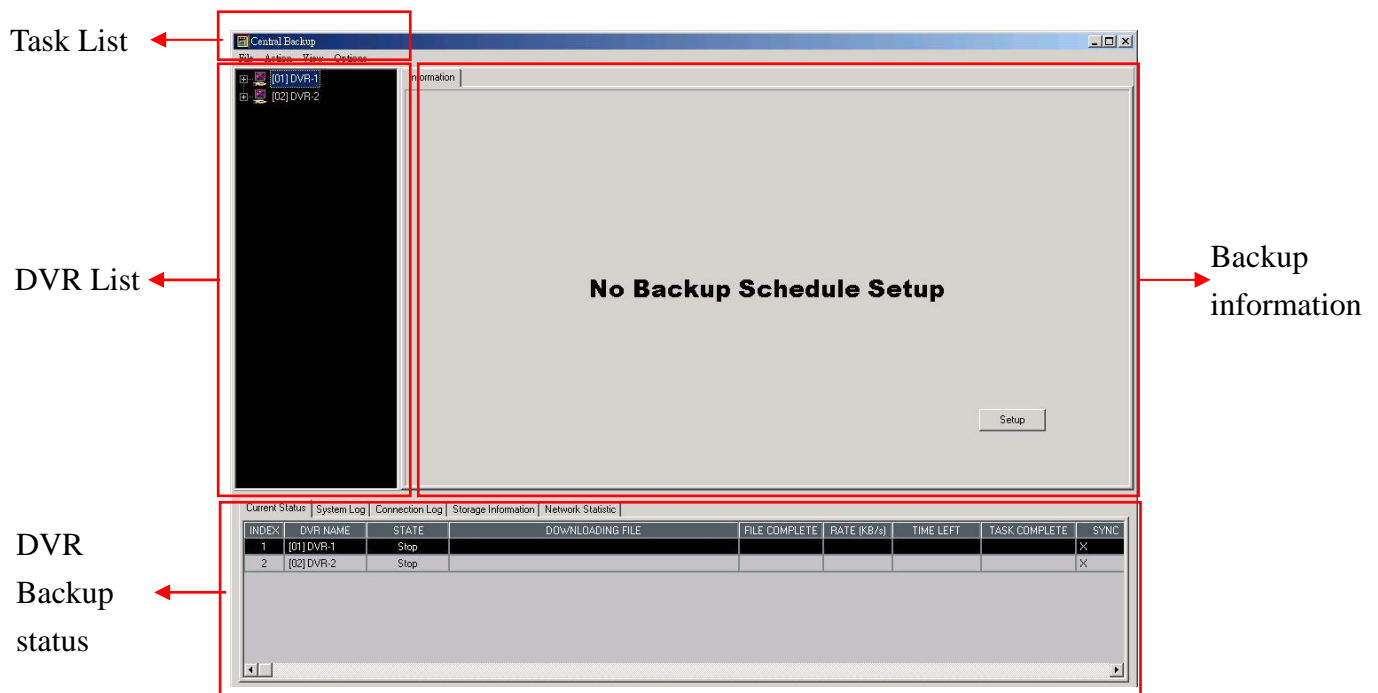


- Log in

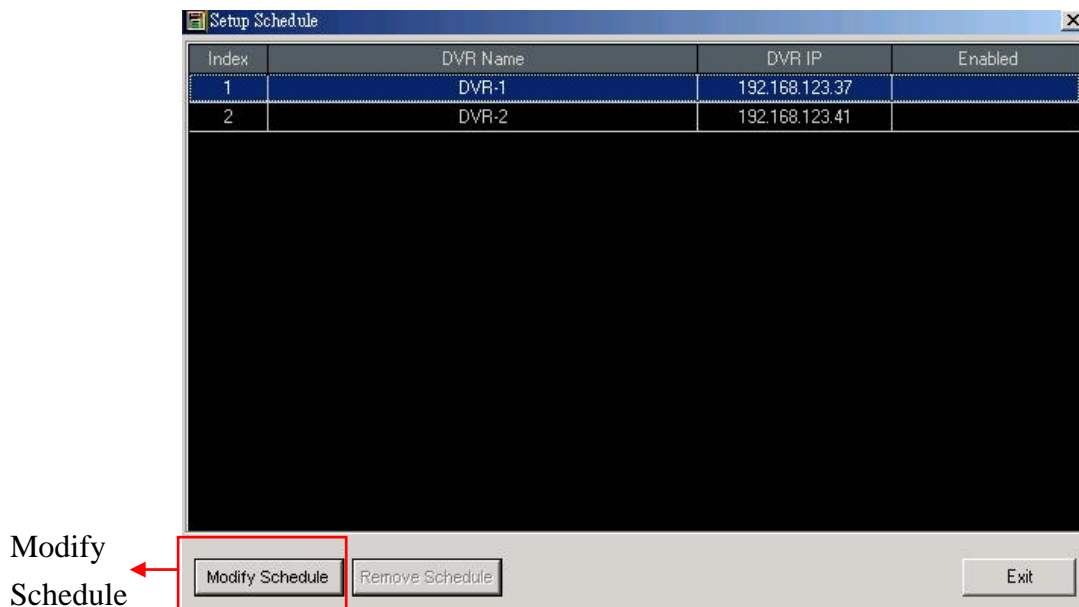
Please select the CMS User Profile which you want to execute the backup. Because only administrator has the authority to back up DVR files, please open the User Profile by entering administrator's password to login to the **Central Backup**.

### 4-11-2 Set up Backup Schedule

If DVR in the DVR list isn't scheduled for backup, it will show “**No Backup Schedule Setup**” in the left window of “**Backup DVR Information**”.



Click “File>Backup Schedule Setup” in task list to start to arrange the DVR backup schedule. It will show the following dialog box. Select DVR you want to arrange the backup schedule and click “Modify schedule” in the left bottom of window.



Then, it will show the following window.

- **DVR File List**

You can click each camera and it will span all of the recorded files of each camera and show them by date.

- **Backup Camera**

Select the cameras you want to back up.

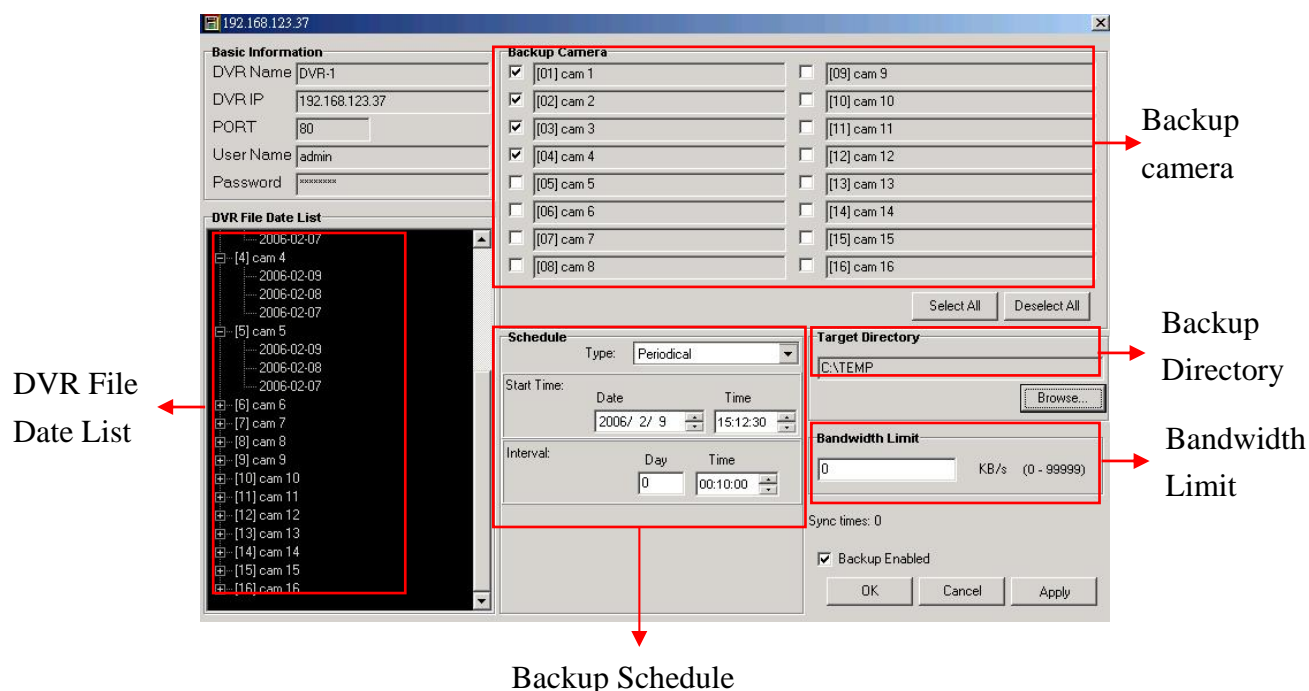
- **Schedule**



There are two types of backup schedule. One is backup by “**Once**” and the other one is by “**Periodical**”.

- **Target Directory**

Select the directory where you want to save the files. You can choose the directory of local HDD or the **Network Drive**.



- **Bandwidth Limit**

Set up the maximum bandwidth of backup task. “0” means no limitation.

### 4-11-3 Functions in Task list

- **Action>Suspend:** Stop the backup task.
- **Action>Resume:** Restart the backup task.
- **Options>Bandwidth Limit:** Set up the limit of the total bandwidth and the maximum number of download files at the same time.
- **Options>Alarm:** You can set up the HDD remaining size. When the size of HDD is smaller than this size, the system will send an alarm audio to warn the administrator.
- **Options>Recycling:** You can set up the HDD reaming size. When the size of HDD is smaller than this size, the system will start to do the recycling.
- **Options>Login:** When power fails and you restart the system, it will login by using these setup values.
- **File>Files check:** This function provides you to check backup status.
  - (1) “**Lost**”: Check the whether the files you download are lost. Then, this file

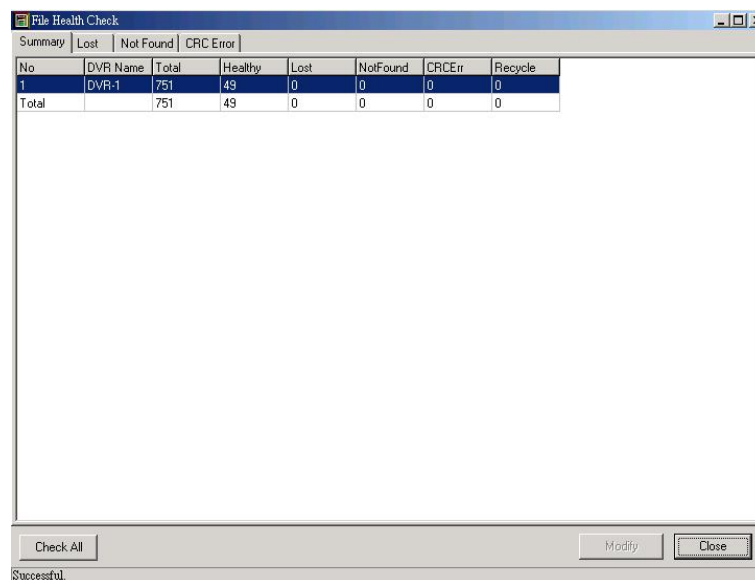


will be recorded as “**Lost**”.

(2) “**Not Found**”: The file has been scheduled to be backed up and backup is not finished. However, you can’t find this file in DVR any more. Then, this file will be recorded as “**Not Found**”.

(3) “**CRC Error**”: The size of file which is successfully backed up is not the as the one of file in DVR. Then, this file will be recorded as “**CRC Error**”.

(4) “**Recycle**”: The files are successfully backed up but these files are overwritten (Recycle) because the size of HDD is not enough. Then, this file will be recorded as “**Recycle**”.

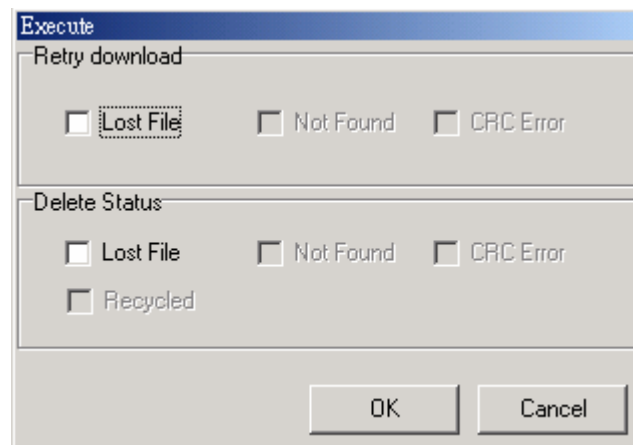


No	DVR Name	Total	Healthy	Lost	Not Found	CRCErr	Recycle
1	DVR-1	751	49	0	0	0	0
Total		751	49	0	0	0	0

Check All      Modify      Close

Successful

After finishing the “**Files check**” and finding unhealthy files (Lost, Not Found, CRC Error), the system will show the following dialog box. User can decide to download these unhealthy files again or ignore these files. If user decides to ignore these files, the system will not mark them as unhealthy file any more when he executes “**Files check**” next time.



**Execute**

Retry download

☐ Lost File    ☐ Not Found    ☐ CRC Error

Delete Status

☐ Lost File    ☐ Not Found    ☐ CRC Error

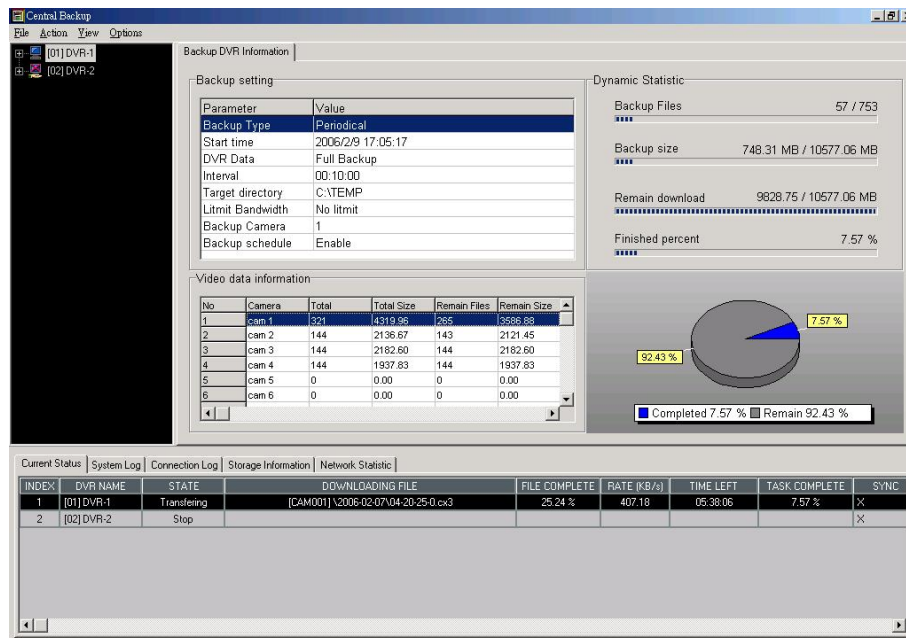
☐ Recycled

OK      Cancel

## 4-11-4 Backup Information

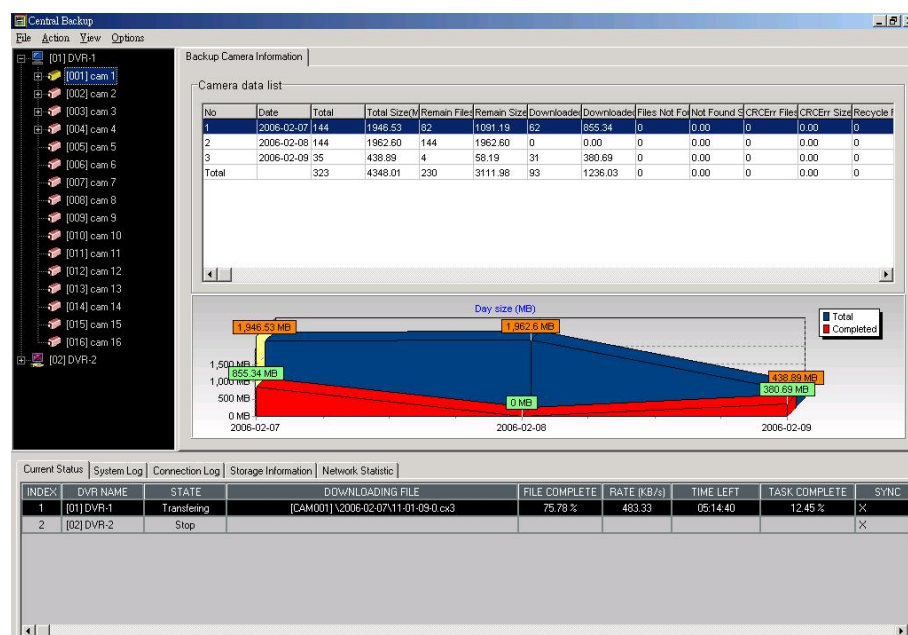
- DVR Backup status

You can click any DVR in DVR list to see the total DVR backup status including backup settings, total backup files, backup size and remain sizes as the following picture.



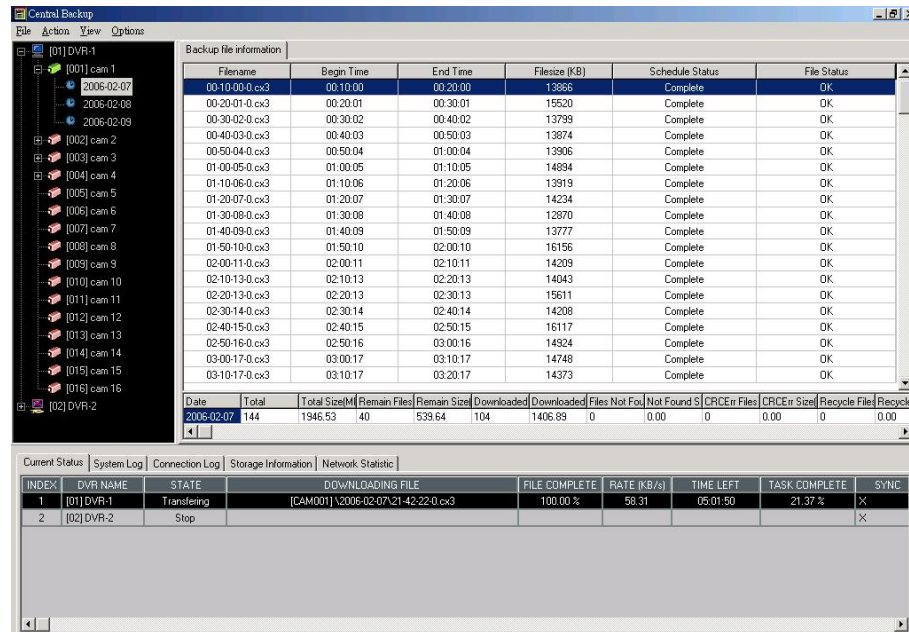
- Camera Backup status

Double click the DVR in the DVR list and it will list all of the cameras connected to this DVR. Click the camera and you can see the backup statistics of this camera as the following picture..



- File Backup status

Double click the camera in the DVR list and it will list all of the dates with recorded files. Click any date and it will list all of the backup files in this date and the status of backup file.



Double click any file in this backup file list and you can activate DVR player to play the file you backup directly. Click the right button of mouse on the file and it will show the directory where the file is saved.

In the column of **Schedule Status**, you can see six types of file backup status.

- (1) Complete: Complete the downloading file.
- (2) Incomplete: File download is not completed.
- (3) Not Found: File can't be found in DVR.
- (4) Deleted: Complete the file downloaded but file has been deleted by user.
- (5) GC: File is downloaded but overwritten due to HDD recycling.
- (6) Wait: File is not downloaded.

- The state of DVR Backup task

In the bottom of window, it provides the various information including Backup Task “**Current Status**”, “**System Log**”, “**Connection Log**”, “**Storage Information**” and “**Network Statistic**”.

In the “**Current Status**” mode, there are 9 kinds of state in the column of “**STATE**” shown as following picture.

### Task state

Current Status   System Log   Connection Log   Storage Information   Network Statistic							
INDEX	DVR NAME	STATE	DOWNLOADING FILE	FILE COMPLETE	RATE (KB/s)	TIME LEFT	TASK COMPLETE
1	[01] DVR-1	Wait					49.11 %
2	[02] DVR-2	Stop					

- (1) Sleep: It's not the time to start the backup task.
- (2) Wait: It's time to start the backup task but the number of total backup tasks is over the one you setting.
- (3) Download: Files are being downloaded.
- (4) Finish: Backup task has been finished but it doesn't mean that all files are backedup. It is possible that some files are not backedup because they are overwritten due to DVR recycling.
- (5) Suspend: Stop the backup task.
- (6) Error: There is an error during the downloading files. Please check logs.  
After fixing the error, please restart this task.
- (7) Disk Full: Disk is full and can't execute backup.
- (8) Disk Error: There is an unknown error happening in the disk. Please check the disk.
- (9) Empty: There is no file to be downloaded in the arranging schedule.

In the “**Network Statistic**” mode, it will show the current network flow as following picture. “**Download Speed**” is current average download speed. “**Total Download**” is calculating the total download file size. When you click “Reset Statistic” icon, the number of “Download Speed” and “Total Download” will be reset to “0”.



**Note:**

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**Bandwidth Limit**

- Individual task bandwidth can't exceed total bandwidth.
- If all of the task bandwidth is set as “ No Limit”, they will share the total bandwidth averagely.
- If the total task bandwidths are bigger then total bandwidth, all of the tasks will share the total bandwidth according to the proportion.
- If not all of the task bandwidth are set as “ No Limit”, total bandwidth will assign to the tasks which are already set in advance according to the proportion and then the rest of bandwidths are assigned to the tasks set as “No Limit”.


**Others**

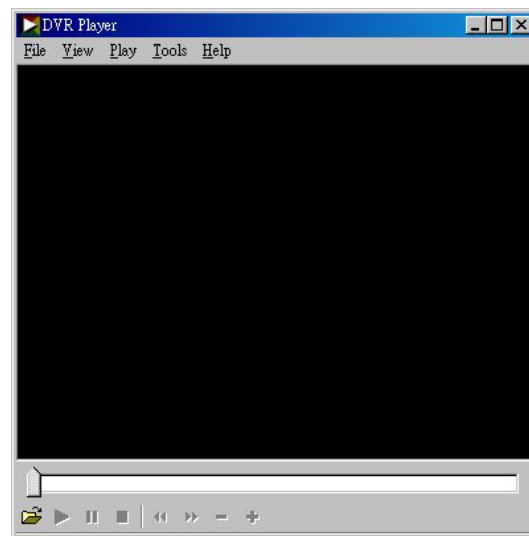
- Backup log files are saved in the directory of CMS and named as “ **RBLog.mlb**”.
-


## 4-12 Use Local Playback

In the playback mode, you can download the video files (Chapter 4-7-2) by clicking



the  and save the files in the directory. The files you download are CX3 format. If you want to play the file, you must execute “DVR Player” from Windows taskbar->Start-> Program-> CMS folder.



- Click the  on the left down of the screen to open the video file and it will show the playing options as following,



Playback

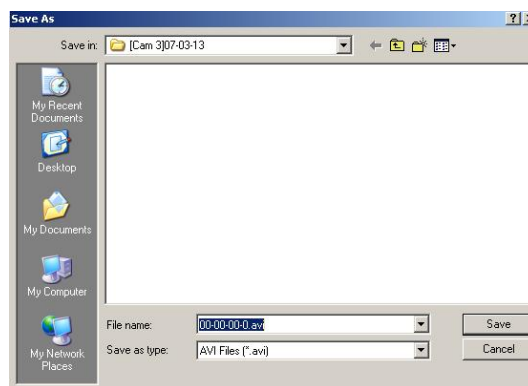


Pause

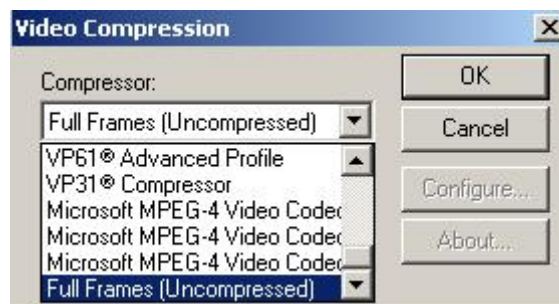


Stop and go back the beginning of the film.

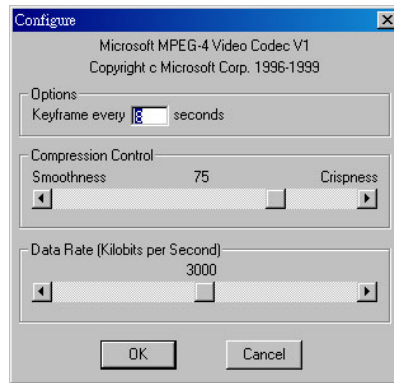
- **AVI Format Export:**  
This function provides you to transform the download files from CX3 format to AVI format.
  - ✓ Open a download file.
  - ✓ In the “Tools’ bar, select “ **Convert to AVI**” and then select the path you want to save the AVI file and key in the AVI file name.



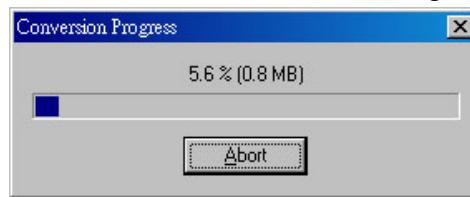
- ✓ Select the transforming format. Here we choose Microsoft MPEG 4 Video Codec.



- ✓ Select transforming parameters and it will influence the file's quality and size.



- ✓ Enter “OK” and then it will show the transforming status.





## 5. Appendix

### 5-1. Maintenance

- ✓ Avoid placing the system at high temperature, high humidity , and also keep away from working in the frequent vibration environment.
- ✓ Operate the system under the conditions of stable and high voltage, If possible, the system should be equipped with UPS ( Uninterruptible Power Supply ).

### 5-2. FAE Support

Any questions, please contact your supplier for your service.